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ANTON WEBERN

THE PATH TO THE NEW MUSIC

*Edited by Willi Reich*

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Translated by Leo Black



## TRANSLATOR'S PREFACE

A note on some frequently-occurring terms may be appropriate. "Unity" = "Zusammenhang". The German can imply both connections, relationships between entities or parts of the same entity, and also the "relatedness", cohesion or unity brought about by these connections. The latter is its usual meaning in these lectures, but at the end of the second series Webern even refers to "Zusammenhänge": "unities" was clearly impossible, and here "connections" has been used.

"Shape" = "Gestalt". At different points the word could have been translated as "feature", "idea", "form", "structure" and "content": for the sake of consistency the ugly but literal "shape" has been used.

"Note"; perhaps apologies are due to American and German readers who would have preferred "tone". The translator's resolve to adhere to the English form was strengthened by the consideration that in "Die Reihe", to which this volume is in a sense a companion, "tone" is frequently used with its specific English meaning of a pure impulse devoid of overtones.

L.B.



## PREFACE

It is unnecessary to justify publication of the sixteen lectures given by Webern early in 1932 and 1933 in a private house in Vienna, before an audience paying a small entrance fee; what does need explaining is the long delay in publishing them, which was the result of unusual circumstances. My friend Dr. Rudolf Ploderer, a Viennese lawyer who took his own life in September 1933, was also a close personal friend of Webern, and took down the lectures in shorthand. We wanted to print them verbatim in the musical periodical "23", which I published in Vienna at that time. But the periodical's small circulation temporarily prevented their publication, and later their sharp attacks on the cultural politics of the Nazis would have exposed Webern to serious consequences. Not until long after the war and Webern's tragic end could I go through the archives of the periodical, which were safe in Switzerland, and it was then that Ploderer's transcripts, already quite yellow with age, also came to light. Universal Edition at once agreed gladly to my proposal that the lectures should now be published.

They are here reprinted exactly according to the shorthand notes; only a few obvious stenographic errors have been corrected. In this form they offer not only their own valuable contents but also a highly life-like idea of Webern's curiously drastic, unforced way of talking, and thus of his wonderful and pure personality, which reconciled high erudition and the keenest artistic thinking with an almost child-like expression of feeling.

Here the chronological order of the two cycles of eight lectures has been reversed, for objective reasons that will immediately be obvious. In this way there is a natural progression from the elementary ideas treated in 1933 to the complex circumstances of twelve-note music sketched in 1932. The extraordinary brevity of some of the texts, particularly from the 1932 cycle, is explained by the fact that on those evenings Webern spoke less and played whole works or individual movements on the piano instead. The occasional repetitions were used quite consciously by Webern to intensify and heighten his remarks, as were frequent long pauses and deep intakes of breath. All this was an essential factor in the unprecedented urgency of his lectures and the shattering impression they made on all their listeners.

It is very characteristic that Webern should have called both cycles "paths." He, who was always "under way," wanted to show others the way too. First

he wanted to show what had at various times over the centuries been "new" in music, meaning that it had never been said before. From the laws that resulted in the course of this, he would then reveal the law governing the onward course of what was at present new.

Here Webern adopted Goethe's view, which he explained with copious quotation. It could be a matter only of "getting to know the laws according to which nature in general, in the particular form of human nature, tends to produce and does produce when she can." Man is only the vessel into which is poured what "nature in general" wants to express. Just as the researcher into nature strives to discover the rules of order that are the basis of nature, we must strive to discover the laws according to which nature, in its particular form "man", is productive. And this leads us to the view that the things treated by art in general are not "aesthetic" but are determined by natural laws, and that all discussion of art can only take place along these lines. Goethe's remark about the art of antiquity, which Webern quotes, also follows the same line: "These high works of art were at the same time brought forth as humanity's highest works of nature, according to true and natural laws. Everything arbitrary or illusory falls away: here is necessity, here is God."

Just as Goethe defines the essence of colour as "natural law as related to the sense of sight," Webern wants to see sound appreciated as natural law in relation to the sense of hearing, and removed from all human arbitrariness. He wants to smooth the way to the great masters of music, but only for those equipped with this realisation and with reverence for the secret of artistic creation.

The musical literature of recent years may have given many readers an idea of Webern's spiritual personality quite different from the one that emerges from these lectures. Free fantasy of that kind can only be countered by saying that there is not a word here which Webern did not himself speak, in the fiery yet controlled way that made each meeting with him an unforgettable experience. These lectures are handed down to posterity as a reflection of those experiences; as a token of gratitude for all the beauty and profundity he gave us by precept and example; as documentation of his lofty spirit, as a monument to his noble humanity. He who has ears to hear, let him hear!

Willi Reich

## THE PATH TO THE NEW MUSIC

### I

I think we go about it this way—I begin by outlining my plan. As it has all started so late—originally it was to last three months—we shall be meeting eight times to discuss things.

I expect many of you have no professional contact with music, and that I should talk to you as laymen, so to speak. I want my lectures to take these people into account, at the risk of boring the “better-informed”—there’s nothing I can do about that. But perhaps they will be interested, too.

I want to take as broad a view as possible and my first question will be this; what is the point, for a layman—(of course I take for granted that musicians already know it all)—so, what is the value, for people not professionally concerned with music, for laymen, of getting involved with these disciplines that are self-evident to the musician? What value can it have?

Here I want to refer to Karl Kraus’ essay on language in the last issue of “Die Fackel.”\* Everything in it can be taken literally as applying to music. Karl Kraus says in this essay how important it would be for people to be at home with the *material* that they are constantly using, so long as they are alive and able to talk. In the last sentence he even says about language, “Let man learn to serve her!” Kraus says—and note this very carefully, it’s immensely important and we must clearly be agreed about it—that it would be foolish to set about dealing with this material, which we handle from our earliest years, as if the value involved were aesthetic. Not, then, because we want to be artistic snobs and dilettantes. What he says is that our concern with language and the secrets of language would be a moral gain. We must say the same! We are here to talk about music, not language, but it is all the same, and we can treat this as a starting point.

Here is Karl Kraus: “The practical application of the theory, which affects both language and speech, would never be that he who learns to speak should also learn the language, but that he should approach a *grasp of the word-shape*, and with it the sphere whose riches lie beyond what is tangibly useful. This guarantee of a moral gain lies in a spiritual discipline which ensures the

\* A Viennese periodical published by Karl Kraus; it first appeared in 1899 and existed for over thirty years. From 1911 onward Karl Kraus wrote all of it himself. “Fackel” = “Torch.”

utmost responsibility toward the only thing there is no penalty for injuring—language—and which is more suited than anything else to teach respect for all the other values in life . . . Nothing would be more foolish than to suppose that the need awakened or satisfied in striving after perfection of language is an aesthetic one.” So it goes on, sentence after sentence!—“It is better to dream of plumbing the riddles behind her rules, the plans behind her pitfalls, than of commanding her.” And so that we do not imagine we can learn to command: “To teach people to see *chasms* in truisms—that would be the teacher’s duty toward a sinful generation.”

I said earlier, “What value can there be in laymen getting involved with these elements, with the riddles behind their rules?” Just this: to teach them to see chasms in truisms! And—that would be salvation . . . to be spiritually involved!

Now do you begin to see what I’m getting at?

What we discuss should help you to find a means of getting to the bottom of music, or let us say the only point of occupying yourselves in this way is to get an inkling of what goes on in music, what it is, and, in a broader context, what art of any kind is. And if, when I’ve drawn your attention to various things, you’re able to look at certain manifestations in present-day music with a little more awareness and critical appreciation, that in itself will have achieved something positive.

Perhaps for the moment I prefer to speak quite generally and say all art, and therefore music too, is based on rules of order, and our whole investigation of this material, which we shall be carrying out, can only aim at proving these rules to some extent. Here I want to quote to you some wonderful lines by Goethe, which must be fundamental to all the things we shall discuss, and which are convincing, to me at least. I quote them so that we shall be at one about our basic assumptions, which could not be more general.

In the introduction to his “Theory of Colour,” Goethe speaks aphoristically of the “impossibility of accounting for beauty in nature and art . . . We want to sense laws . . . one would have to know them.” But Goethe sees this as almost impossible—but that doesn’t make it less of a necessity “to get to know the laws according to which nature in general, in the particular form of human nature, tends to produce and does produce when she can . . .”

What was that? Goethe sees art as a product of nature in general, taking the particular form human nature. That is to say, there is no essential contrast between a product of nature and a product of art, but that it is all the same, that what we regard as and call a work of art is basically nothing but a product of nature in general. What is this “nature in general?” Perhaps what we see around us? But what does that mean? It is an explanation of human productivity, particularly of genius. You see, ladies and gentlemen, it does not come about as “Now I want to paint a beautiful picture, write a beautiful poem,” and so on and so forth. Yes, that happens too—but it’s not art.



And the works that endure and will endure for ever, the great masterpieces, cannot have come into being as humanity, more's the pity, imagines. What I mean by that must be clear to you from those Goethe sentences. To put it more plainly, man is only the vessel into which is poured what "nature in general" wants to express. You see—I would put it something like this: just as a researcher into nature strives to discover the rules of order that are the basis of nature, we must strive to discover the laws according to which nature, in its particular form "man," is productive. And this leads us to the view that the things treated by art in general, with which art has to do, are not "aesthetic," but that it is a matter of natural laws, that all discussion of music can only take place along these lines.

Here laws exist, and probably not all of them are in fact discoverable. But some of them have already been recognised, and applied in what I like to call our craftsman's method. To be specific about music: in the craftsman's method with which the musician must concern himself if he is to be capable of producing something genuine.

Another quotation from Goethe, because it expresses our line of thought so wonderfully. He spoke of the art of antiquity: "These high works of art were at the same time brought forth as humanity's highest works of nature, according to true and natural laws. Everything arbitrary or illusory falls away; here is necessity, here is God." "Humanity's works of nature"—again the same idea! And something else emerges here: *necessity*. We shall have to strive to pin down what is necessity in the great masterpieces. No trace of arbitrariness! Nothing illusory! And I must quote still another passage from Goethe. You know Goethe wrote a "Theory of Colour"; he tries to fathom why it is that everything has a colour, and so on . . . And he says, "But perhaps those of a more orderly turn of mind will point out that we have not yet even given a definite explanation of what colour in fact is . . . Here again there is nothing left but to repeat: colour is natural law as related to the sense of sight."

Since the difference between colour and music is one of degree, not of kind, one can say that music is natural law as related to the sense of hearing. Basically this is the same as colour and what I have said about it. But it is surely the truth, which is why I say that if we are to discuss music here we can only do it while recognising, believing, that music is natural law as related to the sense of hearing.

Perhaps that's enough for the moment to show you my point of view and to convince you that things are really like that. It's natural that when one approaches and looks at and observes great works of art, one must approach them, whether as believer or unbeliever, in the same way one has to approach works of nature; with the necessary awe at the secrets they are based on, at the mystery they contain.

But whether we have yet recognised it or not, one thing must be clear to us—

that rules of order prevail here, that we cannot conceive these laws differently from the laws we attribute to nature; natural law as related to the sense of hearing.

Now a word about the title of my lectures, "The path to the new music."—Were any of you at Schoenberg's lecture?\* He, too, spoke of "New music." What did he mean by that? Did he want to show the path to modern music? My own remarks take on a double significance when related to Schoenberg's remarks; new music is that which has never been said. So new music would be what happened a thousand years ago, just as much as what is happening now, namely, music that appears as something never said before. But we can also say, "follow the course of things through the centuries and we shall see what new music really is." And perhaps then we shall know what new music is today—and what obsolete music is.

So we want to fathom the hidden natural laws in order to see more clearly what is going on today. Then we shall have covered the path to the new music.

Now I must get down to practical matters and treat something of a more general, but musical nature, touch on something quite general, because otherwise we shall misunderstand each other and because it follows directly on what we said earlier, in referring to Goethe's views. Enough of talking about art let's talk about nature!

What is the material of music? . . . The note, isn't it? So already we ought really to start looking here for rules or order, and for the ways the rules of order manifest themselves. I don't know whether this is so well known to you all, but I should like to discuss it with you: how did what we call music come about? How have men used what Nature provided? You know that a note isn't a simple thing, but something complex. You know that every note is accompanied by its overtones—an infinite number, in fact, and it's remarkable to see how man has made use of this phenomenon for his immediate needs before he can produce a musical shape—how he has used this thing of mystery.

To speak more concretely: whence does this system of sound come, which man uses wherever musical works exist? How has it come about? Now, so far as we know, Western music—I mean everything that has developed since the days of Greek music up to our own time—Western music uses certain scales which have taken on particular forms. We know of the Greek modes, then the church modes of bygone ages. How did these scales come about? They are really a manifestation of the overtone series. As you know, the octave comes first, then the fifth, then in the next octave the third, and if you go on, the seventh. What is quite clear here? That the fifth is the first obtrusive note, that is to say it has the strongest affinity with the tonic. This implies that the latter note has the same relationship with the one a fifth lower. So

\* "Neue und veraltete Musik oder Stil und Gedanke" (New and Obsolete Music or Style and Idea), given by Schoenberg to the Vienna Kulturbund in January 1933.

here we have a kind of parallelogram of forces, "equilibrium" is produced, there is a balance between the forces pulling upwards and downwards. Now the remarkable thing is that the notes of Western music are a manifestation of the first notes of this parallelogram of forces: C (GE)—G (DB)—F (CA). So the overtones of the three closely neighbouring and closely related notes contain the seven notes of the scale.

You see: as a material it accords completely with nature. Our seven-note scale can be explained in this way, and we may infer that it also came into being in this way.

Other peoples besides those of the West have music—I don't understand much about it; Japanese and Chinese music, for example, when they are not an imitation of our music. These have different scales, not our seven-note one. But the special consistency and firm basis of our system seem proved by the fact that our music has been assigned a special path.

(February 20th, 1933)

## II

If we go on meeting, I should like it to be our practice that each time someone should give a brief summary of what we discussed last time. We shall then be able to take up more consciously where we left off. We shall try to work things out among ourselves, so as to see ever more clearly.

Last time we set out from Karl Kraus' "word-shape" (he could also have said "linguistic form" or "linguistic shape"), corresponding to a musical shape. So we get beyond material and arrive at a grasp of musical ideas.

Here I want to digress a little, to show how important it is to treat all this, if one is to appreciate musical ideas. It's quite remarkable how few people are capable of grasping a musical idea. I don't mean the broad masses, who haven't much time for things of the mind; I want to take a look at blunders by great minds! You'll have noticed already what a remarkable attitude to music Schopenhauer had, for example. His ideas about music were unprecedented, yet he made the stupidest possible judgment—he preferred Rossini to Mozart! When a contemporary is concerned, blunders are easier to forgive—but he was dealing with things long past—a historical error, in fact!

And again, Goethe—what did he like? Zelter! Schubert sends him the "Erl-King"—he doesn't even look at it. Goethe's famous meeting with Beethoven was certainly not as it's usually described, for Beethoven knew his way about in society very well; he was not a "crazy fool." Of course he lost his temper, but we shouldn't imagine he was a "wild man." Again, Nietzsche! Schopenhauer, Goethe, Nietzsche; all illustrious names! Nietzsche—again, his contact with Wagner was not musical, only intellectual and philosophical. In "Parsifal" Wagner switched to different spiritual territory, and Nietzsche

wouldn't have it. Obviously he was forced to find a substitute, and saw Bizet as the man. The Catholicism of "Parsifal" was the official reason for the split—you see, something extra-musical.

It's always the same: mediocrities are over-valued and great men are rejected. For a man like Nietzsche surely weighed every word he said and wrote. Since he was talking about music he should not have let anything extra-musical make him break with Wagner. We see how hard it obviously is to grasp ideas in music. Otherwise these exceptional minds wouldn't have gone wrong! But it was precisely the ideas that they didn't understand. They didn't even get anywhere near them!

Again, Strindberg! Have you read what he says about Wagner? That all his good passages are stolen from Mendelssohn. And there was a further confusion of ideas; he identified the Valkyrie with Nora—and he couldn't stand Ibsen.

But most recently—Karl Kraus! This is an interesting problem. I needn't say what Karl Kraus means to me, how much I revere him—but here he is constantly making mistakes. Take his well-known aphorism about "music that washes against the shores of thinking." This shows clearly that he is quite incapable of imagining that music can have an idea, a thought, hidden in it. I remember—it was long ago—there was a wild and woolly man called Herwarth Walden, who was a great admirer of Karl Kraus, made propaganda for Kokoschka, and also composed. There was even something of his printed in "Die Fackel." The most miserably amateurish stuff, not a trace of music or musical ideas! Yet Karl Kraus printed it!

If we compare notes with the visual arts, this sort of nadir is unthinkable. It's so absurd that Karl Kraus should have gone wrong in this way! What's the reason? Some specific talent, which one must have got from somewhere, seems to be necessary if one is to grasp a musical idea.

So how do people listen to music? How do the broad masses listen to it? Apparently they have to be able to cling to pictures and "moods" of some kind. If they can't imagine a green field, a blue sky or something of the sort, then they are out of their depth. As you listen to me now, you must be following some logical train of thought. But someone of that kind doesn't follow notes at all. If I sing something simple, a single part—a folk tune, or the shepherd's melody from "Tristan"—so that the musical idea takes up only a little space, without a deeper dimension, doesn't everyone realise that there's a "theme," a melody, a musical idea there? For anyone who thinks musically, at least—and that's where I hope to help you a little—there's no doubt what's going on there. I recognise whether I am faced by a vulgar, banal idea—that has nothing to do with whether it's a well-known idea—I know how to tell a banal idea from a loftier, more valuable one. That whole sentence from Karl Kraus about "the shores of thinking" is so typical! Surely it's meant disparagingly. Is what Bach and Beethoven wrote "a vague mess of feeling"

round and about ideas? What is it, rather, that corresponds to the theory of language which Karl Kraus—rightly—so values? The *laws* of musical form-building!

The second thing Karl Kraus starts from is the “moral gain.” When one gets an inkling of the laws, then one’s bound to find one’s relationship to such minds entirely changed! One stops being able to imagine that a work can exist or alternatively needn’t—it *had* to exist. Where something special has been expressed, centuries always had to pass until people caught up with it. That’s the “moral gain.”

Then I quoted Goethe to you, to give you a better idea of my approach to art. This is why: so that you should recognise the rules of order in art just as in nature. Art is a product of nature in general, in the particular form of human nature.

What perspectives this opens! It’s a process entirely free from arbitrariness. I recall a saying of Schoenberg’s when he was called up; one of his superiors asked him, in surprise, “Would you perhaps be the composer, by any chance?” to which Schoenberg replied, “Yes—nobody wanted to be, so I had to volunteer for it.”

Concretely; notes are natural law as related to the sense of hearing. Last time, we looked at the material of music and saw this rule of order. My constant concern is to get you to think in a particular way and to look at things in this way.—So, a note is, as you have heard, complex—a complex of fundamental and overtones. Now, there has been a gradual process in which music has gone on to exploit each successive stage of this complex material. This is the one path: the way in which what lay to hand was first of all drawn upon, then what lay farther off. So nothing could be more wrong than the view that keeps cropping up even today, as it always has: “They ought to compose as they used to, not with all these dissonances you get nowadays!” For we find an ever growing appropriation of nature’s gifts! The overtone series must be regarded as, practically speaking, infinite. Ever subtler differentiations can be imagined, and from this point of view there’s nothing against attempts at quarter-tone music and the like; the only question is whether the present time is yet ripe for them. But the path is wholly valid, laid down by the nature of sound. So we should be clear that what is attacked today is just as much a gift of nature as what was practised earlier.

And why is it important to take this into account? Look at the music of our time! Confusion seems to be spreading, unprecedented things are happening. So there is talk of “directions.”—But that comes later!—Or, “What direction should we go in, believe in?”—You’ll know what I mean by these “directions.”

I repeat: the diatonic scale wasn’t invented, it was discovered. So it’s given, and its corollary was very simple and clear: the overtones from the “parallelogram of forces” of the three adjoining, related notes form the notes

of the scale. So it's just the most important overtones, those that are in the closest relationship—something natural, not thought up—that form the diatonic scale. But what about the notes that lie between? Here a new epoch begins, and we shall deal with it later.

The triad, the disappearance of which so provokes people, and which has played such a role in music up to now: what, then, is this triad? The first overtone different from the fundamental, plus the second one—that's to say a reconstruction of these overtones, and an imitation of nature, of the first primitive relationships that are given as part of the structure of a note. That's why it sounds so agreeable to our ear and was used at an early stage.

Yet another thing which, so far as I know, Schoenberg was the first to put into words: these simple complexes of notes are called consonances, but it was soon found that the more distant overtone relationships, which were considered as dissonances, could be felt as a spice. But we must understand that consonance and dissonance are not essentially different—that there is no essential difference between them, only one of degree. Dissonance is only another step up the scale, which goes on developing further. We do not know what will be the end of the battle against Schoenberg, which starts with accusations that he uses dissonances too much. Naturally that's nonsense; that's the battle music has waged since time immemorial. It's an accusation levelled at everyone who has dared to take a step forward. However, in the last quarter of a century the step forward has been a really vehement one, and of a magnitude never before known in the history of music—one need have no doubts about saying that. But anyone who assumes that there's an essential difference between consonance and dissonance is wrong, because the entire realm of possible sounds is contained within the notes that nature provides—and that's how things have happened. But the way one looks at it is most important.

But something else is just as important: we have already spoken before about musical ideas. So for what purpose have men always used "what nature provides?" What stimulated them to make use of those series of notes? There must have been a need, some underlying necessity, for what we call music to have arisen. What necessity? To say something, express something, to express an idea that can't be expressed in any way but sound. It can not have been otherwise. Why all the work, if one could say it in words? We find an analogy in painting: the painter has appropriated colour in the same way. It tries to tell people something, by means of notes, that couldn't be said in any other way. In this sense music is a language.

As regards the presentation of musical ideas, obviously rules of order soon appeared. Such rules of order have existed since music has existed and since musical ideas have been presented.

So we shall try to put our finger on the laws that must be at the bottom of this. How have musical ideas been presented in the material given by nature?

We hope this will teach us to distinguish as clearly as possible what in the new music can really point the way.

(27th February, 1933)

### III

Today my mind is not entirely on the subject because of a case of illness.

For us the crucial thing is not points of view but facts. We want to talk about the development of the new music. What was decisive for these musical events? We discussed one point last time, the ever-extending conquest of the material provided by nature. I explained to you the primitive things, how the diatonic scale was acquired, the natural similarity between simple and complex combinations of sound, the way that as it developed the first thing picked on was what lay near to hand. Proof: the triad, which is a reconstruction of the most immediate overtones. This was followed by the ever more thorough exploitation of this given material.

But the second point is this: one had something to say. What did one say? Ideas. How have ideas been formulated according to musical laws? Here we shall follow this development in its broad outlines, with the underlying thought that among the various trends which have come to exist there must be one that will seem to us to fulfil what the masters of musical composition have aimed at and striven for since man has been thinking musically.

Presentation of a musical idea: what is one to understand by that? The presentation of an idea by means of notes. With this object—to try to express an idea—universally valid laws are assumed. Everything that has happened, been striven for, aims at fulfilling these laws. Something is expressed in notes—so there is an analogy with language. If I want to communicate something, then I immediately find it necessary to make myself *intelligible*. But how do I make myself intelligible? By expressing myself as *clearly* as possible. What I say must be *clear*. I mustn't talk vaguely around the point under discussion. We have a special word for this: *comprehensibility*. The highest principle in all presentation of an idea is the law of comprehensibility. Clearly this must be the supreme law. What must happen for a musical idea to be comprehensible? Look: everything that has happened in the various epochs serves this sole aim.

Let's go a step further; what does the actual word "comprehensibility" express? You want to "get hold" of something; if you take an object in your hand, then you have grasped it, you "comprehend" it. But if it's a house we cannot take it in our hand and "comprehend it." So we extend the meaning; something comprehensible is something of which I can get a complete view, whose outlines I can make out. So a smooth, flat surface also makes comprehension impossible. Things alter if something at least is given, a start. But what constitutes a start? Here we come to differentiation.

We mentioned a smooth, flat surface, and we see that, for example, the smooth wall here is divided by pillars. Naturally this is very primitive, but at least it gives me an initial approach to differentiation. Things change entirely when we find other things that can be grasped. What, then, is differentiation? Broadly speaking, the introduction of divisions! What are divisions for? To keep things apart, to distinguish between what is principal and what is subsidiary. This is necessary, to make yourself intelligible, so it must also happen in music. If you want to make something clear to someone, you mustn't forget the main point, the most important thing, and if you bring in something else as an illustration you mustn't wander off into endless irrelevancies. So the whole thing must hang together, otherwise you are unintelligible. Here we have an element that plays a special role: "hanging-together," unity, will be necessary to make an idea comprehensible. Schoenberg even meant to write a book "About unity in music." Let us sum up what we have broadly discussed; differentiation, that's to say the distinction between main and subsidiary points, and unity, "hanging-together."

One could say that ever since music has been written most great artists have striven to make this unity ever clearer. Everything that has happened aims at this, and I believe that in our time we have discovered a further degree of unity, in the much-disputed method of composition that Schoenberg calls "composition with twelve notes related only to each other." We shall treat this method at the end of these lectures. But for me the most important thing is to show how this path has unrolled, and that these things were aimed at by us.

Composition with twelve notes has achieved a degree of complete unity that was not even approximately there before. It is clear that where relatedness and unity are omnipresent, comprehensibility is also guaranteed. And all the rest is dilettantism, nothing else, for all time, and always has been. That's so not only in music but everywhere. In the pictorial arts, in painting, I can only sense, not prove, that there are similar relationships ensuring unity; but I know above all that it's so in language.

Unity serving comprehensibility of ideas! In the various epochs of music this principle has been respected in varying ways. But today I want only to deal with one more point, which is fundamental in our discussions. We should and must talk about the *space* a musical idea can occupy.

In any case it's possible and conceivable for a musical idea to be presented by only one part, in primitive folk songs, for example. And the shepherd's tune from "Tristan," at a time when colossal things had already happened in music, shows that it was still possible to express so much with a single line even then. And the idea of trying to compose anything extra to "clarify" this shepherd's tune would be incomprehensible! This is something unique in later music; it was customary at the outset. In Western music monodic song was the rule in Gregorian chant. That brings us to the point in history where we must start observing, whence we are to follow the path.



But—let's say it straight away—it was soon found necessary not to limit the presentation of a musical idea to one part; they tried to make more room. When several parts sound at once the result is a dimension of depth; the idea isn't expressed by one part alone, and that's the nature of polyphonic presentation of a musical idea. What does it mean, that one part is not enough, that several parts have to be called upon to present a musical idea?

To work it out clearly yet again: at a very early stage it was found necessary to bring another dimension into play. At the beginning ideas could be comprehended by one part, and later on ideas were born that could not be presented in this way, so that more room had to be found and the single part had to be joined by other parts. That isn't chance. That can't be chance! It wasn't a matter of arbitrarily adding another part. The first person who had this idea—perhaps he passed sleepless nights—he knew: it *must* be so! Why? It wasn't produced like a child's toy; absolute necessity compelled a creative mind: he couldn't manage without. The idea is distributed in space, it isn't only in one part—one part can't express the idea any longer, only the union of parts can completely express the idea. The idea found it necessary to be presented by several parts. After that, there was a rapid flowering of polyphony. I should like to give you proofs of it. We shall deal with the principles that governed the gradual exploitation of the tonal field—the natural resources of sound.

(7th March, 1933)

#### IV

Ever fewer people—no, that's part of the lecture!—can nowadays manage the seriousness and interest demanded by art. What's going on in Germany at the moment amounts to the destruction of spiritual life! Let's look at our own territory! It's interesting that the alterations as a result of the Nazis affect almost exclusively musicians, and one can imagine what's still to come. What will come of our struggle? (When I say "our," I mean the group that doesn't aim at external success.) And even if many people who were obliged to believe in it didn't really adhere to the ideology I'm talking about, they showed some distinction and they were given their jobs because they were allowed to reach a certain level. But what will happen next? To Schoenberg, for instance? And though at present it's linked with anti-semitism, later on it will be impossible to appoint anyone capable even if he isn't a Jew! Nowadays "cultural Bolshevism" is the name given to everything that's going on around Schoenberg, Berg and myself (Krenek too). Imagine what will be destroyed, wiped out, by this hate of culture!

But let's leave politics out of it!—But what idea of art do Hitler, Goering, Goebbels have? If I've been at pains to make clear to you the things that

*must* happen—irrespective of whether anyone's there or not—it was done in an entirely opposite spirit.—It's so difficult to shake off politics, because they're a matter of life and death.—But that makes it all the more urgent a duty to save what can be saved. How it's growing and changing!—A few years ago, certainly, we saw changes happening in artistic production, but it was believed that things would still work out somehow. Now we are not far off a state when you land in prison *simply because you're a serious artist!* Or rather, it's happened already!—I don't know what Hitler understands by "new music", but I know that for those people what *we* mean by it is a crime. The moment is not far off when one will be locked up for writing such things. At the very least one's thrown to the wolves, made an economic sacrifice.

Will they still come to their senses at the eleventh hour? If not, spiritual life faces an abyss.

Now let's see—at the last moment, as it were—how history shows the development of the ideas and principles we arrived at: comprehensibility and unity.

We discussed the question of how much space can be assigned to the presentation of musical ideas, and saw that it's possible to sum up the whole idea in a single part, in an independent melody. And I added as an example that there was a whole artistic species where musical ideas were presented *in only this way*, Gregorian chant. It arose along with the rites of the Catholic church. (In passing, similar things are to be seen in Jewish ritual.) But—and now pay attention!—it was felt that this space had to be expanded, that musical ideas had to be presented so that they took in not only the horizontal but also the depth of polyphony. With monody, the idea must be disposed of by the one part. So how did music evolve in the course of centuries? The Netherland style developed very quickly, so that toward the end of the 17th century it was already at an end. It's a great flowering of polyphony. We shall consider later how far it exploited the tonal field, and what methods it used.

But during the years when polyphony was still developing ever more richly, we see another method of presentation emerging, which is connected with more primitive elements—dance forms and the like. What do we see growing up now? (It goes as far as J. S. Bach, who is the climax and unites both methods of presentation.) Starting from the view that an idea can be presented polyphonically, the more popular formal type, dance form, develops, and the concept of "accompaniment" appears. What is it? What are we to understand by "accompaniment?" I don't know whether all this has so far been dealt with from this point of view, but I find it important to take the matter farther in this light. Surely it's remarkable for one person to sing and another to "add something!" So there's a hierarchy: main point and subsidiary point—something quite different from true polyphony. Here again the idea is not exhausted by one melodic line, but certain tendencies of the *musical functions* have to be made clearer. In this period, which goes back to Bach and

Handel (though one shouldn't mention the two in one breath!), the all-important factors must have been the ones aiming at presentation in which one part is the most important. It's the period that saw an extraordinary widening of the tonal field through a new emphasis on harmony.

Let's look back! (Schoenberg's last lecture is the stimulus here). We set out from the seven-note scale, and now the remarkable thing is that in Bach's time the conquest of the twelve-note scale and at the same time that of harmony were achieved. But the polyphonic epoch was superseded by another which, at first in a primitive way, limited itself to a return to single-line melody—with an “accompaniment” of course, since polyphony was an accepted thing, but without exploiting true polyphony.

This is the period when the homophonic style begins, the period of Monteverdi, when opera developed, a period that limited itself to thinking of fine melodies for the voice, and to providing a supplement for the melody, reduced to bare essentials, in the accompaniment. This method of presentation reached its climax in the Viennese classical school. But now it's interesting to see how things break up, how there was a return to the limits of a more primitive method after the extraordinary achievements of polyphony. There was again the urge to cram the musical idea into one single line. One can imagine singing a tune by Mozart, or one of Beethoven's themes, unaccompanied: in fact everything is there that had to be expressed, conveyed by the one part. And it's interesting that the function of the accompaniment strikes out along a new path, which in its turn is developed.

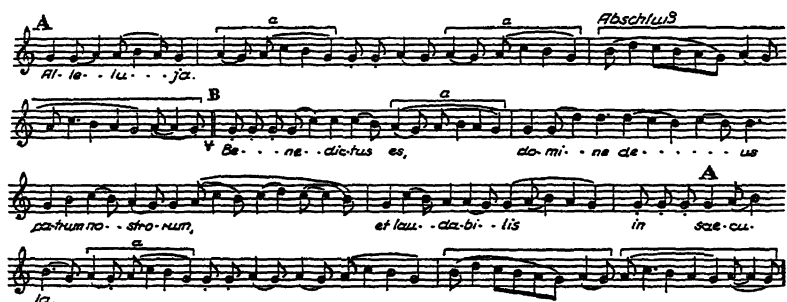
We want to be quite clear that in classical music there is again an urge to express the idea in a single line. But at this point interesting things happened: the “accompaniment's” supplement to the single-line main part became steadily more important, there was a transformation, quite gradual and without any important divisions, stemming from the urge to discover ever more unity in the accompaniment to the main idea—that is, to achieve ever firmer and closer unifying links between the principal melody and the accompaniment. This happened quite imperceptibly, and its sequel is that today we have arrived at a polyphonic method of presentation. So, once again, ever-increasing conquest of the material!

I should like to put it in another way: to take the broadest view, methods of presentation have alternated, since presentation of musical ideas developed either through a single line or through several, and we can see that the two methods have inter-penetrated to an ever-increasing degree. The final result of these tendencies is the music of our time.

Now we are further on in time, we cannot create works by the methods of a time further back, for we have passed through the evolution of harmony. In the classics there was an urge to compress the entire idea into one line, and to add constant supplements in the accompaniment.—How can we understand the work of contemporary masters from this point of view? It's produced by

the inter-penetration of these two methods of presentation. We've arrived at a period of polyphonic presentation, and our technique of composition has come to have very much in common with the methods of presentation used by the Netherlands in the 16th century—but, naturally, with all the other things that have resulted from the conquest of the tonal field.

Now we must look at some examples and see how things have happened, how these principles have been realised. So let's go back to earlier epochs! First I shall show you something from the monodic period, from the time of Gregorian chant.



Alleluia with verse in melismatic style (8th mode)

How does that strike you? I said last time that the first principle is comprehensibility! How is it expressed here? It's astonishing, the way all the principles already show up here!—What strikes us first? The repetition! We find it almost childish. What's the easiest way to ensure comprehensibility? Repetition. All formal construction is built up on it, all musical forms are based on this principle.

Let me play the piece again—you see, three sections! The second is different from the first, the third is like the first. We find this in a melody from the 12th century! Already it formulates the whole structure of major symphonic forms, exactly as in Beethoven's symphonies. We must be clear as to how all this comes about, what it expresses: it is primarily a symmetrical A-B-A shape, such as one knows from one's own body. The task was to create a shape that's as easy as possible to grasp. So we have a three-part structure, in which the first section is repeated, and the parts also contain repetitions.

Finally, something more general. Let's learn this lesson from our example: from this simple phenomenon, this idea of saying something twice, more often, as often as possible, in order to make oneself understood, the most artful things developed, and if you like we can jump to our own times; the basis of our twelve-note composition is that a certain sequence of the twelve notes constantly returns: the principle of repetition!

(14th March, 1933)

Last time we dealt with the various epochs during which the role of musical space has varied fundamentally. We saw that there were epochs when one type of musical presentation was expressed differently and to a greater degree than in others. The second point we dealt with was the combination of presentation methods in particular historical periods.

On the other hand, history also showed a constant alternation between greater and more modest demands on musical space. This is the framework—everything else that helps the principle of comprehensibility is arranged round it.

The monody of Gregorian chant was followed by a period of polyphony, apparent not only in the Netherlanders but also in Palestrina and the German masters of the time. Now, what did this period do for the principle of comprehensibility?

We must look at all this from two standpoints; on the one hand, that of comprehensibility and unity, on the other that of the conquest of the tonal field.



End of a Rondeau by Jehannot de l'Escurel

A three-part song on a French text. We see how the tonal field gradually covers the whole diatonic scale.

Do you know how this scale was used, in what forms and shapes? I mean the church modes. That was the time when the diatonic scale developed out of the church modes. They started on particular notes of the scale. What are the church modes? How did we pass from the modes to the diatonic scale? The church modes are built on each step of the seven-note scale, so they always contain this scale. The seven-note scale starting on C is Ionian, the one on D Dorian, on E Phrygian, on F Lydian, on G Mixolydian, on A Aeolian, on B Hypophrygian. The special thing about the Ionian mode—our C major—was that it had a semitone, the so-called leading-note, before the recurrence of the tonic C.

It was soon found that an ending with leading-note and tonic is especially

effective, and that's why the semitone also came to be introduced before the recurrence of the tonic in the other modes. But this meant that the modes condensed into two groups—major and minor—and that was the end of them. So the decline of the modes happened through the addition of leading-notes foreign to the mode, called accidentals. In our example we still have the seven notes, but at the moment when the authentic seventh was replaced by the sharpened one—hence the name “accidental”—, something was there that led to chromaticism, namely an extra note. At the moment when only major and minor were left the period of J. S. Bach began. By then the additions had already gone so far that all twelve notes of the chromatic scale could be used.



From a three-part song motet by Guillaume Dufay

We see that it ends on one note. Another piece ends on the open fifth. The third is missing—there was neither major nor minor, whose essential difference lies in the third. So you see again that this is all entirely in accordance with nature; there could be no major or minor—the third was felt to be a dissonance, nobody trusted himself to use it.

Now an example from the 16th century, by Ludwig Senfl, which already ends with the third.



End of a five-part tenor motet by Senfl

This contains the essential points in the exploitation of the diatonic scale, and a hesitant attempt to end with the third—which means an approximation to major and minor.

Now let's look at this epoch from the other point of view! What do we find as regards the presentation of ideas? In dealing with Gregorian chant I've already pointed out that the principle of repetition is enormously important in enhancing comprehensibility. Now we see how all that developed along these lines is based on this principle. How is it in this example?\*

Something can be repeated in the same way or a similar one. Here we see the beginnings of polyphony based on this principle of repetition, in the sense that the various simultaneous parts are not unrelated; a relationship is produced among them—the third, fourth and sixth parts sing the same thing. How is it possible for several parts to sing the same thing one after the other? That's the essence of canon, the closest conceivable relationship between several parts. The fact that they sing the same thing at different moments makes unusual cleverness necessary. But the reason is always the urge toward the greatest possible unity. The successive entries meant that the opening motive took on greater importance. At first it isn't an exact canon, but at the outset there was always the need for each part to enter as the preceding one had done, precisely in order to create a relationship. Initial imitation!

Resourcefulness soon went further; something can be the same but under slightly altered conditions, as when the line is turned backwards (cancrizan). But then the following also happened—the series of notes was repeated, but altering the direction of the intervals (inversion). What can we conclude from this? What are we to make of it? We already see in this epoch that composers' every effort went to produce unity among the various parts, in the interests of comprehensibility.

Now I'd like to go through with you the forms produced by the urge toward the clearest possible presentation of ideas! It's the next epoch that gives us an insight into this. We ask ourselves, "how can the principle of repetition be applied when the idea is carried by a single line?" We find traces even in early polyphonic music; sequences—a certain rhythmic succession is repeated, but beginning on a different degree of the scale. However, not only rhythms are repeated, but the whole course of the melody. That occurs as one line unfolds. Earlier we said that unity was at first produced through inversion and reversal—but then we hadn't begun to discuss rhythm. Here we have the primeval form of the *motive*. The repetition of motives and the ways in which it was managed—these we find in the next epoch, from Bach till the development of the classical forms. The climax is surely found in Beethoven. But what happened here? The repetition of motives. By "motives" we mean, like

\* A music example must be missing here, since Webern refers to six parts whereas the Senfl passage is in five.

Schoenberg, the smallest independent particle in a musical idea. But how do we recognise one? Because it's repeated!

We see something similar in Gregorian chant; everything is based on repetition. If as a contrast I play the quite banal melody "Kommt ein Vogel geflogen"



how much firmer the shape of everything is here than in Gregorian chant! There, everything is much more amorphous, less easy to grasp. The urge to produce order, to introduce order, can be constantly felt in folk song. Here we find *period* form. This period form, this way of shaping the melody and the layout of the notes, provides one of the most important forms in which a musical idea can be presented, and the most unprecedented ideas were later expressed through this form.

But the period, as demonstrated here, is only *one* of the forms in which an idea could be presented along these lines—construction of melody—and is in fact the more primitive one, such as occurs above all in folk song. Why is it so simple? Because it's simple repetition. But, on the other hand, since there is this possibility of repetition it's been exploited in various ages to express as much as possible—to accommodate a rich store of musical shapes.

But soon the need was felt to shape things still more artistically, and a form of thematic structure arose that's rather like this:



J. S. Bach, 5th English Suite, Sarabande



Unlike the period, this isn't a four-bar structure (the normal form, especially in Beethoven), but one of only two bars, immediately repeated; so instead of four bars' antecedent and four bars' consequent there are two bars immediately repeated—and since there was immediate repetition, the same thing twice, something new could and had to follow at once. The way this happened was that motives were *developed*. But development is also a kind of repetition.

So we see that even in the fullest and purest musical structure we can find quite simple forms. Everything that came after Bach was already prepared for. Not even in Haydn and Mozart do we see these two forms as clearly as in Bach. The period and the eight-bar sentence are at their purest in Bach; in his predecessors we find only traces of them. And these two forms are the basic element, the basis of all thematic structure in the classics and of everything further that has occurred in music down to our time. It's a long development, and it's often hard to make out those basic elements. But everything can be traced back to them.

And now we must recognise clearly: what is expressed here? Why did these forms come about as they did? Now, beneath it all is the urge to express oneself as comprehensibly as possible. We shall talk about this next time, and here I want to say only one more thing; I've gone in a certain direction, and now we find this process, this remarkable course of events—that what we saw in polyphony, the greatest possible unity, that's to say the so-called Netherland technique—that this tendency is again gradually taking possession of these things, and that a new polyphony is developing.

(20th March, 1933)

## VI

We haven't so much time left and must see that we get to the end of the matter. There are three lectures left. Last time we looked a little at the Netherlands school—it's a long way from there to the present! But you'll see that it all unrolls surprisingly smoothly.

Last time I talked about the period and the eight-bar sentence, but there was a deeper problem involved; the highest flowering of polyphony was reached with the Netherland school, and later we see all this polyphony come to an end and be replaced by something quite different, the development of forms in which presentation of musical ideas calls for a single line. In this connection we've talked about forms, and I want to go on and show you how this presentation was perfected. It can be seen that these forms have gone on providing

the basis for all construction of themes, because everything that happened after the high classical period—particularly in Schumann, Brahms and Mahler—is based on these forms. We also looked at two examples from the great days of polyphony and saw—let's say this quite clearly, it will throw light on the music of our day, too!—saw how the conquest of the tonal field gradually came about; that's to say, the days of the polyphonic style simultaneously see the beginning of the development from diatonicism to chromaticism—to the conquest of the twelve notes.

To recapitulate: first men conquer the seven-note scale, and this scale became the basis of structures that led beyond the church modes. And now we see how gradually two of these scales come ever more to the fore and push the others aside: the two whose order is that of present-day major and minor. Here indeed the remarkable thing is that the need for a cadence was what led to the preference for these two modes, the need for the leading-note that was missing in the other modes. It was then transplanted to the other scales, so that they became identical with the two enduring ones. So accidentals spelt the end for the world of the church modes, and the world of our major and minor genders\* emerged.

Now we must look at the further conquest of the tonal field! The two tonal genders, major and minor, were predominant down to our time, but now, for about a quarter of a century, a new music has existed that has given up this "double gender" in its progress toward a single scale—the chromatic scale.

So how did major and minor come to be superseded? As in the dissolution of the church modes, the destructive elements came of the urge to find a particular type of ending. The cases are quite analogous! As part and parcel of this urge to define the key exactly, the very end of a piece—the "cadence"—came to contain a number of chords that by their nature couldn't be clearly related to one single key. Wandering, ambiguous chords appeared, and they were also introduced in the course of the piece, as well as being used in this way at the end. So the course of the piece became steadily more ambiguous, until a time had been reached when these wandering chords were the ones most used, and the moment came when the keynote could be given up altogether.

So when did all this come about? Let's first discuss when and where the major-minor genders became established. It was the time after the Netherland school, the epoch I've mentioned several times already, marked by the rise of the Italian opera. Major and minor finally became established during this period.

\* In the original, "mode"="Tonart"; "gender"="Geschlecht", which would normally also be translated as "mode". L.B.



J. S. Bach, chorale, "Christ lag in Todesbanden"

What are we to make of this? What has happened? What plays the main role here? We mustn't look at it aesthetically, only note how it became possible for all the things of today to happen. It is the emergence, or rather it's already there, of the world in which the twelve notes hold sway. Here already is a piece wholly based on what we call chromaticism, on progression by semitones. The semitone was indeed also there in diatonic music, between the mediant and subdominant and between the leading-note and tonic, and it was just there that the dissolution had begun. Through this cadential function history repeated itself in major-minor tonality; dominants were produced on each degree of the scale—so-called "inter-dominants," and this has already happened in the chorale arrangements. Notes were introduced that didn't belong; once again accidentals. From there one ranged ever farther abroad, until the new accidentals came to predominate, once again at the end of the piece, as one tried to end in an ever more complex way, at the cadence. That's how it happened again in our time; to give an ever richer, more interesting shape to major and minor, we drew on chords that were steadily farther removed, and this led to the situation where major and minor were done for.

We must sum up again; the conquest of chromaticism came about in the same way as that of major and minor. Let's look at the other point, the presentation of ideas! What happened in this epoch? I've already mentioned

that immediately before Bach polyphony broke off and the development of a melodic type of music ensued. Here something played a role that mustn't be overlooked, the emergence of instrumental music, associated with the opera. I mention this because it introduced elements into music that came from a different sphere and gained a great influence on all the further developments, in contrast to strictly musical thinking: folk music, with its instrumental accompaniment, and dance forms also belong here. (These dance forms become an important influence through their connection with instrumental music; for example, in Bach we find not only the organ but the lute. I want merely to hint at what happens during this development—the harpsichord, suite form, etc.) The most important point for us is that the forms fundamental in further developments grew up in association with these influences. So here again Bach is involved at a vital stage in the development of music.

Now, it's remarkable to observe—I've deliberately described the basic forms already, the period and the eight-bar sentence—that a pure culture is not to be found until Beethoven, not so clearly even in Mozart and Haydn. In fact in Bach's melodies and those of his time we find only the seeds of the development that reached its climax in Beethoven.

What is a melody of this kind like in Bach?



J. S. Bach, Matthew-Passion, aria "Blute nur, du liebes Herz"

Here already we have the essence of the eight-bar sentence in blueprint; a figure is repeated, then there are two variations of it, then it's repeated again. Development of an idea can be seen quite clearly. Already this is the form of the eight-bar sentence of the kind found most clearly in Beethoven; it's the form most favoured by post-classical music. In any case it's been used more than the period. (It isn't so important for you really to understand this form completely, you need only grasp what was aimed at in its use). Now I want to show you a passage from a Beethoven sonata, that can be described as an eight-bar sentence.



L. v. Beethoven, Piano Sonata Op. 2 No. 1, 1st movement

Here again we see a figure that's repeated and developed.



Arnold Schoenberg, Verklärte Nacht, 1st violin, 2nd subject in E major

Here we find the periodic version again\*. The same form is always at the bottom of it. Nothing new has been added, but the forms have been handled ever more freely.

What is this "freer treatment?" In one case the repetitions are literal and without gaps, like the links of a chain, whereas later one became freer and left out certain intermediate stages, thinking—metaphorically—"It's happened once already, so I can jump to something else without carrying on the development any further." Things were more immediately and abruptly juxtaposed, which of course makes them harder to understand. But what else plays a part? The fact that repetitions were carried out with ever-increasing freedom—one proceeded by variation, since the development brought about by means of one motive led ever further afield. Curves became longer, ever more broadly spun out.

\* i.e., the first six bars return (in varied form) at the end of the example. L.B.

Let's again sum up, because I still want to talk about the new music itself! But I hope you already have a general picture. So once again, in headlines: diatonic scale; destruction of the church modes: on the other hand, in relation to form, the greatest flowering of polyphony, through ever-increasing unity, with the result that in the late Netherland school a whole piece would be built out of a sequence of notes with its inversion, cancrizan, altered rhythm, etc. More unity is impossible, since everyone has the same thing to say. Then on again—away with it! What came next? Development of melody, major and minor, conquest of chromaticism—that's only vocal music. Instrumental music crept into the picture here, playing on instruments became an art, a new expressive form in association with the folk song. Beethoven. And the conquest of the tonal field? After the classics—the break-up of tonality.

So we see ever greater conquests in the field provided by sound—as Goethe would have said, “natural law as related to the sense of hearing”—and the urge for comprehensibility trying to create ever more unity, just because unity increases comprehensibility.

Now we shall see how these elements have gone on developing and have led to the last decade's new growth, composition with twelve notes related only one to another. It's the final product of the two elements we've observed so far. People are wrong to regard it as merely a “substitute for tonality.” Here the element of comprehensibility is important above all—to introduce ever more unity! That's been the reason for this kind of composition.

(27th March, 1933)

## VII

Today let's examine the new music with an eye to the two factors we've recognised as most important—the conquest of the tonal field and the presentation of ideas!

First I want to talk about the presentation of ideas. Now we come straight to the most recent times, and here I want to say expressly what new music I want to discuss: the music that has come about because of Schoenberg and the technique of composition he discovered, which has existed for about twelve years and which he himself has called “composition with twelve notes related only to each other.” I mean this music, for everything else is at best somewhere near this technique, or is consciously opposed to it and thus uses a style we don't have to examine further, since it doesn't get beyond what was discovered by post-classical music, and only manages to do it badly. The greatest strides have been made by the very music, the very style, that Schoenberg introduced and that his pupils have continued.

These lectures are intended to show the path that has led to this music, and to make clear that it had to have this natural outcome. Last time I emphasised

that this new music, the kind created by Schoenberg, is the direct result of only one thing—the development of the tonal field and its ever-increasing exploitation; but that the other factor was also present, the presentation of ideas, or what is borne in mind in order to present ideas. That's why it was important for me to concentrate my remarks on these two factors.

First, then, the presentation of ideas! I said the other day that after the Netherland polyphonic style had passed its climax, at the beginning of the seventeenth century, composers all began striving to create forms that made it possible to express their urge for clarity. This led to the development of those classical forms that found their purest expression in Beethoven; the period and eight-bar sentence.

It's a fact, and nobody can disprove it, that everything which has happened since then can be traced back to these forms. They are the forms in which principal subjects are cast, they are the cycles that have developed in classical symphonies and chamber music, and they are the forms that occur in opera, insofar as it uses self-contained numbers. I remarked recently that instrumental music arose with the homophonic style of the Italian opera, and indicated the forms that developed in connection with the popular type of dances and so on. Here I'm thinking particularly of Suites by Bach's forerunners and Bach himself, with Minuet, Sarabande, Gigue, etc., headed by a prelude and with a song-like movement, the Air. Here we already see the main traits of the forms later manifest in the symphony. Most of these forms were later cast aside and there remained only the Scherzo (which Haydn still often called a Minuet), the Air, which is transformed into the Adagio second movement in Beethoven, and the light final movement,\* which turned into the rondo.

But one movement is still missing—the first, the true sonata movement, which arose at that time and became the most subtly worked and richest movement of the cycle. We must be clear about what happened here: the aim was always presentation of an idea. Beethoven concludes the development of these forms in which ideas were presented. What happened then, after Beethoven, that's to say Schubert, Schumann, Mendelssohn, Brahms, Bruckner, Mahler, all makes use of these forms, just as our music does, the music of our day. So the development lasted about two hundred years, from Bach's predecessors to Beethoven.

Certainly a Mahler symphony is put together differently from one by Beethoven, but in essence it's the same, and a Schoenberg theme is also based on those forms, the period and the eight-bar phrase. The period derives more from song. Beethoven used it particularly in his Adagios. So in a sense it derives from what's most generally comprehensible. Now we find that in developments since Beethoven the eight-bar sentence has been used more. Later, for instance in Brahms, it isn't easy to relate pieces to those formal types, but they are there all the same. The modern symphony, too, is based on

\* Ger. "Kehraus".

these forms, and nobody racks his brains to find anything new. The last few years have tried rather to adhere very strictly to these forms. But in fact that has only just become possible again.

What, then, is implied in the presentation of an idea? An upper part and its accompaniment. Forms were the result of this distribution of space. We have already frequently mentioned the effort to achieve an ever tighter unity, in the interests of comprehensibility. How has this urge made itself felt since the time of the classical composers? Without theoretical ballast we could put it like this: at an early stage composers began to exploit and extend to the rest of the musical space the shapes present in the upper part. To put it schematically, development of the motives contained in the shapes of the upper part was especially expanded. Nothing was to fall from heaven—everything was to be related to what was already present in the main part. In fact there was very soon an attempt to remain “thematic,” to derive things and partial forms from the principal theme. I should like to mention some of these; I’ve spoken of the development as the part of the work specially created so that the theme could be “treated.” Now, how does this happen? By repeating the theme in various combinations, by introducing something that is the theme unfolding not only horizontally but also vertically—that’s to say a reappearance of polyphonic thinking. And here the classical composers often arrived at forms that recall those of the “old Netherlanders”—in their canon and imitation. I should also point out, rather late, that in Bach’s time, and in his own works, one form of presentation was particularly developed—the fugue. This is a structure that arose absolutely from the urge to create a maximum of unity; everything is derived from the theme. Classical composers’ symphonic form also resorted to this, so it’s very remarkable that what we know as fugue didn’t in fact exist at the time of the Netherlanders. For the fugue derived from instrumental music. Here a polyphonic form of musical thought developed quite aside from vocal music.

We’ve also referred to Bach in connection with the enrichment of the tonal field. *For everything happens in Bach*: the development of cyclic forms, the conquest of the tonal field, and, with it all, staggering polyphonic thought! Horizontally and vertically. And here we must return to something earlier! It’s important that Bach’s last work was the “Art of Fugue,” a work that goes wholly into the abstract, music lacking all the things usually shown by notation—no sign whether it’s for voices or instruments, no performing indications. It’s almost an abstraction—or I prefer to say *the highest reality*! All these fugues are based on *one* single theme, which is constantly transformed: a thick book of musical ideas whose whole content arises from a single idea!

What does all this mean? The desire for maximum unity. Everything is derived from one basic idea, from the one fugue-theme! Everything is



"thematic." And now we find this creeping into later forms, in the development section. This now became the arena, as the fugue was earlier. The desire to work "thematically" gradually shows itself in the accompaniment, too; an alteration, an extension of the original primitive forms has begun. So we see that this—our—type of thinking has been the ideal for composers of all periods. (Wagner's leitmotives are perhaps another matter. For example, if the Siegfried motive crops up many times because the drama calls for it, there is unity, but only of a dramatic kind, not musical, thematic. Naturally Wagner often also worked in a strictly thematic way; moreover he, of all composers, played a great part in creating musical unity linked to that of the drama).

To develop everything else from *one* principal idea! That's the strongest unity—when everybody does the same, as with the *Netherlanders*, where the theme was introduced by each individual part, varied in every possible way, with different entries and in different registers. But in what form? That's where art comes in! But the watchword must always be "Thematicism, thematicism, thematicism!"

One form plays a special role—the *variation*. Think of Beethoven's Diabelli variations. At times great composers have chosen something quite banal as the basis of variations. Again and again we find the same desire to write music in which the maximum unity is guaranteed. Later, variation found its way into the cyclic form of the sonata, particularly in Beethoven's second movements, but above all in the finale of the Ninth Symphony, where everything can be traced back to the eight-bar period of the main theme. This melody had to be as simple and comprehensible as possible; on its first appearance it's even given out in unison, just as the *Netherlanders* started off by writing at the top the five notes from which everything was derived. Constant variations of one and the same thing! Let's pursue that! Brahms and Reger took it up. Bach, too, had already written in this way. In fact Bach composed everything, concerned himself with everything that gives food for thought!

But the accompaniment also grew into something else; composers were anxious to give particular significance to the complex that went together with the main idea, to give it more independence than a mere accompaniment. Here the main impetus was given by Gustav Mahler; this is usually overlooked. In this way accompanying forms became a series of counter-figures to the main theme—that's to say, polyphonic thinking! So the style Schoenberg and his school are seeking is a new inter-penetration of music's material in the horizontal and the vertical: polyphony, which has so far reached its climaxes in the *Netherlanders* and Bach, then later in the classical composers. There's this constant effort to derive as much as possible from one principal idea. It has to be put like this, for we too are writing in classical forms, which haven't vanished. All the ingenious forms discovered by these composers also occur in the new music. It's not a matter of reconquering or reawakening the *Netherlanders*, but of re-filling their forms by way of the classical masters, of linking these two things. Naturally it isn't purely polyphonic thinking; it's both at once.

So let's hold fast to this: we haven't advanced beyond the classical composers' forms. What happened after them was only alteration, extension, abbreviation; but the forms remained, even in Schoenberg!

All that has remained—but something has altered, all the same; the effort to produce ever tighter unity and thus to get back to polyphonic thinking. Brahms is particularly significant in this respect—also, as I said, Gustav Mahler. If you ask, "What about Bruckner and the others?" I should say, "Nobody can do everything at once." In Bruckner it's a matter of conquering the tonal field. He transferred to the symphony Wagner's expansions of the field. For the rest he was certainly not such a pioneer; but Mahler certainly was. With him we reach modern times.

Now I'd like to take a quick look at the other point, the expansion of the tonal field!

Last time I quoted a chorale harmonisation by Bach, to show that something already existed in Bach that wasn't superseded by the later classical composers, nor even by Brahms: it's impossible to imagine anything more meaningful than these constructions of Bach's! Beethoven and Schubert never did it any better. On the contrary, perhaps they found other things more important. What's the point of these chorales? To provide models of musical thinking based on the two genders,\* major and minor, which were fully developed by then! Here I have 371 four-part chorales by Bach—there could just as well be 5,000! He never got tired of them. For practical purposes? No, for artistic purposes! He wanted *clarity*!

And yet it was this which sowed the fatal seeds in major and minor. As in the church modes the urge to create a cadence led to the "pleasanter" semitone, the leading-note, and everything else was swept away, so it was here, too; major and minor were torn apart, pitilessly—the fatal seed was there! Why do I talk about this so much? Because for the last quarter of a century major and minor haven't existed any more! Only most people still don't know. It was so pleasant to fly ever further into the remotest tonal regions, and then to slip back again into the warm nest, the original key! And suddenly one didn't come back—a loose chord like that is so ambiguous! It was a fine feeling to draw in one's wings, but finally one no longer found it so necessary to return to the keynote. Up to Beethoven and Brahms nobody really got any further, but then a composer appeared who blew the whole thing apart—Wagner. And then Bruckner and Hugo Wolf; and Richard Strauss also came and had his turn—very ingenious!—and many others; and that was the end of major and minor.

Summing up, I'd say: just as the church modes disappeared and made way for major and minor, so these two have also disappeared and made way for a single series, the chromatic scale. Relation to a keynote—tonality—has been lost. But this belonged in the other section on the presentation of ideas. The

\* or "modes"; see p. 28. L.B.

relationship to a keynote gave those structures an essential foundation. It helped to build their form, in a certain sense it ensured unity. This relationship to a keynote was the essence of tonality. As a result of all the events mentioned, this relationship first became less necessary and finally disappeared completely. A certain ambiguity on the part of a large number of chords made it superfluous. And since sound is natural law as related to the sense of hearing, and things have happened that were not there in earlier centuries, and since relationships have dropped out without offending the ear, other rules of order must have developed—we can already say a variety of things about them. Harmonic complexes arose, of a kind that made the relationship to a keynote superfluous. This took place via Wagner and then Schoenberg, whose first works were still tonal. But in the harmony he developed, the relationship to a keynote became unnecessary, and this meant the end of something that has been the basis of musical thinking from the days of Bach to our time: major and minor disappeared. Schoenberg expresses this in an analogy: double gender has given rise to a higher race!

(3rd April, 1933)

## VIII

Today we shall follow the final stage of the development, and first we shall revert to the point about the dissolution of major and minor—the disappearance of key. Last time we already looked at some of this when we discussed the starting point of the dissolution. I mentioned that even in Bach's chorale harmonisations tonality was dealt a severe blow. It's very difficult to make the recent final events understandable; but it's important to talk about them because lately people have tried to make out that this state of affairs is a quite new invention, although it has existed for a quarter of a century. I don't want a polemic, but just now there's a lot of talk about this, in connection with political developments of course, and things are made to look as if it were all something foreign and repellent to the German soul, as if the whole thing had boiled up overnight; quite the contrary, it's been stewing for a long time, a quarter of a century already, it's something that's been going on ever so long, so that it's become impossible to put the clock back—and how would one set about it, anyway? I don't know whether there was the same weeping and wailing over the church modes: anyway, just at the moment there's a frightful hubbub about tonality.

We must get this quite clear, so that you know whether to believe me or not! I wanted to show that the process in this case is quite analogous with what happened before. Above all, I say it because recently in the Austrian Radio's weekly, that's to say before the widest possible public, a Mr. Rinaldini—he'd

be another of those "German" composers—has written that at present people are squabbling over whether tonality should be given up. *He* may be; we see it quite plain, we don't need to squabble! As I said last time, nobody has gone beyond our style, and there's no need to discuss the others, who are merely re-writing the old music.

Dissolution of tonality: in connection with Bach's special type of harmonisation, then with inter-dominants, with the tendency to introduce other degrees with their dominants, music came to use notes foreign to the scale of the key concerned. For example, C major doesn't contain F sharp, it has no sharpened notes at all, so if I use F sharp in C major—perhaps as part of the dominant of the dominant—then I have broken out of the key. That is a modulation. But I don't want to treat it as that, rather to relate it to the keynote—which is destroyed as a result. So then something different was brought into play.

The minor subdominant, F-A flat-C, also plays a part here. In popular usage, it's a matter—starting from C major—of using the black keys. Then it went still further; the cadential points were what contained the seeds of destruction. The church modes disappeared in an analogous way, and by analogy major and minor are also dissolved. Suddenly every degree was there twice over; for example, in C major the supertonic could be D or D sharp. Now let's go further; when every degree was doubled, then one already had the twelve notes, but still related to the tonic, to the key.

There was also the development of harmony; first the ambiguous chords, for example the diminished seventh, which can be related to our keys, then the chords were still further altered—certain notes in them were sharpened or flattened. How did this happen? The original consonances in the triads were developed into seventh-chords, dissonances; above all, it was part-writing that led to chords of that kind. The ear gradually became accustomed to these complex sounds, which at first only appeared cautiously in passing or prepared, and finally all these chords were felt to be natural and agreeable. Ambiguous chords were produced, such as the augmented triad, which plays a great role in Wagner but isn't really anything so terrible—it happens in any minor key as a diatonic chord on the mediant. The augmented five-six chord belongs here, too. With these wandering chords one could get to every possible region. Even the so-called "Tristan chord" occurred before Wagner, but only in passing, and not with the significance and the kind of resolution it has in Wagner. Then there came the fourth chords, and others built out of superimposed thirds. Later this happened faster, the new chords were themselves altered, and so we got to a stage where these new chords were almost the only ones used. But we still related them to the tonic, so we could still rejoin the key.

But ultimately, because of the use of these dissonant chords—through ever-increasing conquest of the tonal field and introduction of the more distant overtones—there might be no consonances for whole stretches at a time, and finally we came to a situation where the ear no longer found it indispensable to

refer to a tonic. When is one keenest to return to the tonic? At the end, of course. Then one can say, "The piece is in this or that key." But there was still a time when one returned at the last moment, and where for long stretches it was not clear what key was meant. "Suspended tonality." It only emerged at the end: the whole thing, everything that has occurred, is to be understood in this way or that. But things of this kind piled up more and more, and one day it was possible to do without the relationship to the tonic. For there was nothing consonant there any more. The ear was satisfied with this suspended state, too; nothing was missing when one had ended "in the air"—one felt still the flow of the complex as a whole was sufficient and satisfying.

Is that all clear? This moment—I can speak from personal experience—this moment, in which we all took part, happened in about the year 1908. Now it's 1933—so it's 25 years ago—a jubilee, no less!

Arnold Schoenberg was the man responsible. Now I must carry on the tale from my own experience. You mustn't imagine it was a sudden moment. The links with the past were most intense. One can also take the view that even with us there is still a tonic present—I certainly think so—but over the course of the whole piece this didn't interest us any more. So there came to be music that had no key-signature; to put in a more popular way, it used not only the white notes in C major but the black ones as well. But it was soon clear that hidden laws were there, bound up with the twelve notes; the ear found it very satisfying when the course of the melody went from semitone to semitone, or by intervals connected with chromatic progression. That's to say, on the basis of chromaticism, not of the seven-note scale. The chromatic scale came to dominate more and more: twelve notes instead of seven.

Now there was a stage that's hard to explain; the dominance of the chromatic scale, of chromatic progressions, brought up a particularly tricky point. What happens when I try to express a key strongly? The tonic must be rather over-emphasised—so that listeners notice, otherwise it won't be enough to give satisfaction. It's just in Beethoven that we find this very strongly developed; the tonic is constantly reiterated, especially toward the end, in order to make it stand out enough. No effort is too great when it's a matter of shaping this ending so that it really strikes home. Now, however, the exact opposite became a necessity; since there was no tonic any more, or rather since matters had gone so far that the tonic was no longer necessary, we felt the need to *prevent* one note being over-emphasised, to prevent any note's "taking advantage" of being repeated.

Of course composition can't go on without note-repetition; the work would have to end when all twelve notes had occurred. What does one make of it? How are we not to repeat? When is a repetition not disturbing? I said the composition would have to be over when all twelve notes had been there. So no note must be repeated during a round of all twelve! But a hundred "rounds" could happen at once! That's all right, only when *one* has started,

then the other notes of the row must follow it, without any of them being repeated. That's what we sensed. There can even be a twelve-note chord—such chords have been written—then one could start again, and even then something else could be heard at the same time, that would also have to obey the same law.

That really expresses the law. "The round of the twelve notes"—nothing more! Some remarkable things were involved, but they happened not through theory but by listening. For example, it was found disturbing if a note was repeated during a theme. And here we come to the salient point—pay attention!—now you will understand how the style arose. Not only from the fact that we've lost tonality, but in a quite matter-of-fact way, from the point of view of unity.

What's happened? A round of twelve notes. One didn't leave the order to chance, one looked for a particular form of row to be binding for the course of the whole composition. One put the twelve notes in a special order, to whose course the composition was tied. All twelve notes in a particular order—and they have to unfold time after time in that way! A particular succession of twelve notes is constantly there.

And now let's switch back to the masters of the second Netherland school! Then a composer would build a melody out of the seven notes, but always related to this scale. The same happens in Schoenberg's discovery, composition with twelve notes related only one to another. Nothing else at all! But why was it interesting to us that "the same thing" was sung all the time? One tried to create unity, relationships between things, and surely the maximum unity is when everyone sings the same thing all the time—the maximum unity imaginable!

Let's sum up: I referred to the growth of melody, of accompaniment. Composers tried to create unity in the accompaniment, to work thematically, to derive everything from one thing, and so to produce the tightest—maximum—unity. And now everything is derived from this chosen succession of twelve notes, and thematic technique works as before, on this basis. But—the great advantage is that I can treat thematic technique much more freely. For unity is completely ensured by the underlying series. It's always the same; only its manifestations are different. This is very akin to Goethe's conception of rules of order and the significance that's in all natural events, and that can be sensed in them. His "Plant Metamorphosis" clearly shows the idea that everything must be just as in Nature, since here, too, Nature expresses herself in the particular form "man." That's what Goethe says.

And what is manifest in this view? That everything is the same; root, stalk, blossom. And in Goethe's view the same holds good for the bones of the human body. Man has a series of vertebrae, each different from the others and yet similar. Primeval bone—primeval plant. And it's Goethe's idea that one could invent plants *ad infinitum*. And that's also the significance of our

style of composition. And we needn't be afraid that things will manifest themselves with too little variety because the course of the series is fixed.

Now I'm asked, "How do I arrive at this row?" Not arbitrarily, but according to certain secret laws. (A tie of this kind is very strict, so that one must consider very carefully and seriously, just as one enters into marriage—the choice is hard!) How does it come about? I can imagine doing it on purely constructive lines, perhaps so that as many intervals as possible were provided. But speaking from my own experience, I've mostly come to it in association with what in productive people we call "inspiration." What we establish is the law. Earlier, when one wrote in C major, one also felt "tied" to it, otherwise the result was a mess; one was obliged to return to the tonic, one was tied to the nature of this scale. Now we base our invention on a scale that has not seven notes but twelve, and moreover in a particular order. That's "composition with twelve notes related only to each other."

Naturally all this had its preliminary stages; it didn't all come about in a hurry. Schoenberg, in a work he has still not finished and that nobody has seen, his "Jacob's Ladder," tied himself not to twelve notes but to seven. Even in his "Serenade" (Op. 24), the ties are only partial. But finally Schoenberg expressed the law with absolute clarity, about 1921. Since that time he's practised this technique of composition himself (with one small exception), and we younger composers have been his disciples.

Now the analogy has still to be developed, starting from the Netherlanders; the basic shape, the course of the twelve notes, can give rise to variants—we also use the twelve notes back to front—that's cancrizan—then inverted—as if we were looking in a mirror—and also in the cancrizan of the inversion. That makes four forms. But then what can one do with these? We can base them on every degree of the scale.  $12 \times 4$  making 48 forms. Enough to choose from! Until now we've found these 48 forms sufficient, these 48 forms that are the same thing throughout. Just as earlier composition was in C major, we write in these 48 forms.

We've reached the end! Ever more complete comprehension of the tonal field and clearer presentation of ideas! I've followed it through the centuries and I've shown here the wholly natural outcome of the ages, that's to say composition with twelve notes related only to each other. To take one more bird's-eye-view of it all: if this is the outcome of a natural process—of sound as natural law related to the sense of hearing!—what do we see working through this development? I want to end by quoting a saying by one of the most wonderful thinkers of our time: in his book on Virgil,\* Theodor Haecker mentions his expression "labor improbus"—referring to agriculture, work in the service of the Almighty, so that "a primal blessing shall come to bestow greater blessings!"

(10th April, 1933)

\* Theodor Haecker, "Vergil, Vater des Abendlandes" (Virgil, father of the West), Leipzig, 1931.

## THE PATH TO TWELVE-NOTE COMPOSITION

I didn't invent the title you've seen. It's Schoenberg's. This year I was to talk in Mondsee on this subject, so I had a brief correspondence with Schoenberg about what such a lecture should be called. He suggested "The path to twelve-note composition."

We must know, above all, what it means: "twelve-note composition." Have you ever looked at a work of that kind? It's my belief that ever since music has been written, all the great composers have instinctively had this before them as a goal. But I don't want to trust you with these secrets straight away—and they really are secrets! Secret keys. Such keys have probably existed in all ages, and people have unconsciously had more or less of an idea of them.

Today I want to deal generally with these things. So what has in fact been achieved by this method of composition? What territory, what doors have been opened with this secret key? To be very general, it's a matter of creating a means to express the greatest possible unity in music. There we have a word we could discuss all day. Perhaps, after all, it's important to talk about these things—I mean things so general that everyone can understand them, even those who only want to sit and listen passively. For I don't know what the future has in store . . .

Unity is surely the indispensable thing if meaning is to exist. Unity, to be very general, is the establishment of the utmost relatedness between all component parts. So in music, as in all other human utterance, the aim is to make as clear as possible the relationships between the parts of the unity; in short, to show how one thing leads to another.

Turning now to music, it's to some extent historical. What is this "twelve-note composition?" And what preceded it? This music has been given the dreadful name "atonal music." Schoenberg gets a lot of fun out of this, since "atonal" means "without notes;" but that's meaningless. What's meant is music in no definite key. What has been given up? The key has disappeared!

Let's try to find unity! Until now, tonality has been one of the most important means of establishing unity. It's the only one of the old achievements that has disappeared; everything else is still there. Now we shall try to probe deeper into this story.

So: what is music? Music is language. A human being wants to express ideas in this language, but not ideas that can be translated into concepts—



*musical* ideas. Schoenberg went through every dictionary to find a definition of an "idea," but he never found one. What is a musical idea?

(whistled) "Kommt ein Vögel geflogen"\*

That's a musical idea! Indeed, man only exists insofar as he expresses himself. Music does it in musical ideas. I want to say something, and obviously I try to express it so that others understand it. Schoenberg uses the wonderful word "comprehensibility" (it constantly occurs in Goethe!). Comprehensibility is the highest law of all. Unity must be there. There must be means of ensuring it. All the things familiar to us from primitive life must also be used in works of art. Men have looked for means to give a musical idea the most comprehensible shape possible. Throughout several centuries one of these means was tonality, since the seventeenth century. Since Bach, major has been distinguished from minor. This stage was preceded by the church modes, that's to say seven keys in a way, of which only the two keys, like genders, finally remained. These two have produced something that's above gender, our new system of twelve notes.

Returning to tonality: it was an unprecedented means of shaping form, of producing unity. What did this unity consist of? Of the fact that a piece was written in a certain key. It was the principal key, which was selected, and it was natural for the composer to be anxious to demonstrate this key very explicitly. A piece had a keynote: it was maintained, it was left and returned to. It constantly reappeared, and this made it predominant. There was a main key in the exposition, in the development, in the recapitulation, etc. To crystallise out this main key more definitely, there were codas, in which the main key kept reappearing. I have to keep picking out these things because I'm discussing something that's disappeared. Something had to come and restore order.

There are two paths that led unavoidably to twelve-note composition; it wasn't merely the fact that tonality disappeared and one needed something new to cling to. No! Beside that, there was another very important thing! But for the moment I can't hope to say in one word what it is. Canonic, contrapuntal forms, thematic development can produce many relationships between things, and that's where we must look for the further element in twelve-note composition, by looking back at its predecessors.

The most splendid example of this is Johann Sebastian Bach, who wrote the "Art of Fugue" at the end of his life. This work contains a wealth of relationships of a wholly abstract kind; it's the most abstract music known to us. (Perhaps we are all on the way to writing as abstractly). Although there's still tonality here, there are things that look forward to the most important point about twelve-note composition: a substitute for tonality.

\* Cf. P. 26.

What I'm telling you here is really my life-story. This whole upheaval started just when I began to compose. The matter became really relevant during the time when I was Schoenberg's pupil. Since then a quarter of a century has already gone by, though.

If we want to find historically how tonality suddenly vanished, and what started it, until finally, one day, Schoenberg saw by pure intuition how to restore order, then it was about 1908 when Schoenberg's piano pieces Op. 11 appeared. Those were the first "atonal" pieces; the first of Schoenberg's twelve-note works appeared in 1922. From 1908 to 1922 was the interregnum: 14 years, nearly a decade and half, this stage lasted. But already in the spring of 1917—Schoenberg lived in the Gloriettegasse at the time, and I lived quite near—I went to see him one fine morning, to tell him I had read in some newspaper where a few groceries were to be had. In fact I disturbed him with this, and he explained to me that he was "on the way to something quite new." He didn't tell me more at the time, and I racked my brains—"For goodness' sake, whatever can it be?" (The first beginnings of this music are to be found in the music of "Jacob's Ladder.")

I'm sure it will be very useful to discuss the last stage of tonal music. We find the first breach in sonata movements, where the main key often has some other key forced into it like a wedge. This means the main key is at times pushed to one side. And then at the cadence. What is a cadence? The attempt to seal off a key against everything that could prejudice it. But composers wanted to give the cadence an ever more individual shape, and this finally led to the break-up of the main key. At first one still landed in the home key at the end, but gradually one went so far that finally there was no longer any feeling that it was necessary really to return to the main key. At first one did think, "Here I am at home—now I'm going out—I look around me—I can wander off as far as I like while I'm about it—until I'm back home at last!" The fact that cadences were shaped ever more richly, that instead of chords of the sub-dominant, dominant and tonic, one increasingly used substitutes for them, and then altered even those—it led to the break-up of tonality. The substitutes got steadily more independent. It was possible to go into another tonality here and there. (When one moved from the white to the black keys, one wondered, "Do I really have to come down again?") The substitutes became so predominant that the need to return to the main key disappeared. All the works that Schoenberg, Berg and I wrote before 1908 belong to this stage of tonality.

"Where has one to go, and does one in fact have to return to the relationships implied by traditional harmony?"—thinking over points like that, we had the feeling, "We don't need these relationships any more, our ear is satisfied without tonality too." The time was simply ripe for the disappearance of tonality. Naturally this was a fierce struggle; inhibitions of the most frightful kind had to be overcome, the panic fear, "Is that possible, then?" So it came about

that gradually a piece was written, firmly and consciously, that wasn't in a definite key any more.

You're listening to someone who went through all these things and fought them out. All these experiences tumbled over one another, they happened to us unselfconsciously and intuitively. And never in the history of music has there been such resistance as there was to these things.

Naturally it's nonsense to advance "social objections." Why don't people understand that? Our push forward *had* to be made, it was a push forward such as never was before. In fact we have to break new ground with each work: each work is something different, something new. Look at Schoenberg! Max Reger certainly developed, too, as a man develops between his fifteenth year and his fortieth, but stylistically there were no changes; he could reel off fifty works in the same style. We find it downright impossible to repeat anything. Schoenberg said, and this is highly revealing, "Suppose I'd written an opera in the style of the 'Gurrelieder?'"

How do people hope to follow this? Obviously it's very difficult. Beethoven and Wagner were also important revolutionaries, they were misunderstood too, because they brought about enormous changes in style.

I've tried to make this stage really clear to you and to convince you that just as a ripe fruit falls from the tree, music has quite simply given up the formal principle of tonality.

(15th January, 1932)

## II

Let's take another look at what led to the disappearance of tonality. There are still people who base their composition on tonality, even though a quarter of a century has gone by since then.

The desire to set up material contradicting the chosen main key even in the harmonic sense—one could say, to limit the district known as "tonic" and then to drive in wedges—finally led to the very place where one wanted to show up these contradictions in a special light—the cadence. This was the point where even classical composers often wandered far from the home key and used resources that had a fatal effect on the key—at the very place where it was felt particularly important to let the key emerge clearly. Certain chords and harmonic relationships had a radical, radicalising effect; for example, the minor subdominant (F minor in C), and, deriving from this, the sixth above the minor subdominant (in C, the chord F-A flat-D flat, the Neapolitan sixth; the flat second of C major.)

This example is itself enough to show clearly the path that could lead to twelve-note composition. You surely know that the whole system is built on the fact that one regards the different notes of the scale as degrees and can

take the relationships of the individual degrees in various ways. After all, there isn't merely *one* supertonic but two; in C major, one is D, the other D flat. If we do this for each degree of the scale, what emerges? The chromatic scale—and the twelve-note scale is complete.

Another means of modulation is the augmented five-six chord (in C major, F sharp-A flat-C-D sharp).

I can exploit the double meaning of all these chords so as to move elsewhere as fast as possible. In fact there was no longer any reason to return to the basic key, and that meant the end of tonality.

An example you will find very striking is the end of Brahms' "Parzenlied." The cadences found here are astonishing, and so is the way its really remarkable harmonies already take it far away from tonality!

The musical score is for Johannes Brahms' "Parzenlied", end of work. It is written for piano and violin. The key signature is one sharp (F#), and the time signature is 2/4. The score is divided into four systems. The first system shows the piano introduction with a piano (pp) dynamic and the instruction "ma ben marc." (more marked). The second system continues the piano part with a piano (pp) dynamic and the instruction "pp sempre" (piano throughout). The third system introduces the violin part with a piano (pp) dynamic and the instruction "viol.". The piano part has a decrescendo (dim.) and a piano (pp) dynamic. The fourth system shows the piano part with a decrescendo (perendosi) and the violin part with a forte (f) dynamic and a piano (pp) dynamic. The score ends with a final cadence in G major.

Johannes Brahms, Parzenlied, end of work

So it was not a matter of someone's saying, "How would it be if we did without tonality?" There was prolonged and careful consideration, and intuitive discovery. The clichés simply disappeared. The chromatic path, that's to say the path where one moves by semitones, had begun.

(22nd January, 1933)

### III

Brahms is a much more interesting example than, for instance, Wagner. In Wagner, harmony is of the greatest importance, but Brahms is in fact richer in harmonic relationships.

So a state of "suspended tonality" was created. In the end our ears no longer made us feel we had to intervene, actually to introduce the keynote. All twelve notes came to have equal rights. The whole-tone scale: it's nonsense to believe this originates in Oriental or Far-Eastern music! Its origin is simply and solely the urge for expressiveness ("Hoiotoho!" in Wagner's "Walküre"). The whole-tone scale consists of only six notes. Something else eating away the old tonality! Its first use in six-note chords was by Debussy in "Pelléas and Mélisande," and in Schoenberg's orchestral work with the same title. Such chords could be used without preparation and without resolution. Their origin is melodic.

Schoenberg said, "Any kind of unity is possible!" This way of circling—never calling things by their right name—using one substitute after another for the basic chords—preferring to leave open everything that's implied; that's the nature of twelve-note composition!

To illustrate this, Schoenberg's "Music for a Film Scene" (Op. 34, written in 1930) will be played. A publishing house in Magdeburg had commissioned a number of prominent composers to write music to accompany a film scene. Commissions went out, for example, to Richard Strauss, Franz Schreker, and also to Schoenberg. The content is roughly: threatening danger, panic fear and catastrophe. This is the sense of everything that happens as the music unfolds.

(29th January, 1932)

### IV

Today we shall examine tonality in its last throes. I want to prove to you that it's really dead. Once that's proved, there's no point in going on dealing with something dead.

Last time we discussed chords built from the whole-tone scale, and arrived at a six-note chromatic passing chord (F-A-C sharp-G-B-D sharp, or E flat-

G-B-A-D flat-F). Simply by adding one such chord to another that's analogously constructed, we produce a twelve-note chord.

With all this we approach the catastrophe; 1906, Schoenberg's Chamber Symphony (fourth-chords!); 1908, music by Schoenberg that's no longer in any key. Relationship to a keynote became ever looser. This opened the way to a state where one could finally dispense with the keynote. The possibility of rapid modulation has nothing to do with this development; in fact, just because all this went on in order to safeguard the keynote, to extend tonality—precisely because we took steps to preserve tonality—we broke its neck!

I go out into the hall to knock in a nail. On my way there I decide I'd rather go out. I act on the impulse, get into a tram, come to a railway station, go on travelling and finally end up—in America! That's modulation!

We—Berg and I—went through all that personally. I say this, not so that it will get into my biography, but because I want to show that it was a development wrested out of feverish struggles and decisively necessary.

In 1906 Schoenberg came back from a stay in the country, bringing the Chamber Symphony. It made a colossal impression. I'd been his pupil for three years, and immediately felt "You must write something like that, too!" Under the influence of the work I wrote a sonata movement the very next day. In that movement I reached the farthest limits of tonality.

At that time Schoenberg was enormously productive. Every time we pupils came to him something else was there. It was frightfully difficult for him as a teacher; the purely theoretical side had given out. By pure intuition, amid frightful struggles, his uncanny feeling for form had told him what was wrong.

Both of us sensed that in this sonata movement I'd broken through to a material for which the situation wasn't yet ripe. I finished the movement—it was still related to a key, but in a very remarkable way. Then I was supposed to write a variation movement, but I thought of a variation theme that wasn't really in a key at all. Schoenberg called on Zemlinsky for help, and he dealt with the matter negatively.

Now you have an idea how we wrestled with all this. It was unendurable. Indeed I did go on to write a quartet in C major—but only in passing. The key, the chosen keynote, is invisible, so to speak—"suspended tonality!" But it was all still related to a key, especially at the end, in order to produce the tonic. The tonic itself was not there—it was suspended in space, invisible, no longer needed. On the contrary, it would already have been disturbing if one had truly taken one's bearings by the tonic.

Now look what else happened! Schoenberg's Song Op. 14: "Ich darf nicht dankend an dir niedersinken" (last bar in B minor, the song has two sharps in its key-signature). "In diesen Wintertagen" (C major). You see, it's completely clear; everywhere we see the unity with what happened earlier.

Here we do still find a key—but no cadence. In the end we said to ourselves, “Even if we still have at the end to produce a relationship to the tonic, it need hardly be used to emphasise, ‘This is the end!’ Anyone can tell when a piece is over, anyway.”

So there’s nothing new here; everything hangs together; no-one knows where the one ends and the other begins.

Now let’s look at Schoenberg’s George songs Op. 15! Nos. II and V: no more return to the tonic, everyone feels the end anyway. No. VII (accompaniment for one hand alone); the way Schoenberg returns at the end to what happened at the beginning!

*Nicht zu rasch (Allegro)*

*Sehr langsam*

#### Arnold Schoenberg, George-Lieder Op. 15, No. VII

Only the means used are different. The song returns to its opening. To anyone with a refined sense of form it was all over, and a repetition would sound trivial to anyone of sensitivity.

(4th February, 1933)

#### V

Clearly this period really started with the George songs Op. 15. You’ll recall the first song of Schoenberg’s Op. 14 (“Ich darf nicht dankend . . .”), with a key-signature of two sharps and still ending in B minor. In No. II of the George songs it would also be possible to make out a key, especially toward the end; one could conceivably take it as G major and add a G major chord at the end.

molto rit. *pp* — — — — —  
und die gold-ten Bin- sen säu- seln,  
*espress.* *pp* bleiben, aber etwas steigern *espress.*  
molto rit. — — — — —  
doch mein Traum ver- folgt nur Ei- nes.  
*pp*

# Arnold Schoenberg, George-Lieder Op. 15, No. 11

Why is it still so there, and not so any longer here? What's the explanation? This question really takes us into the inmost mystery of twelve-note music.

Rather than answer the question at once I want to show you some more examples, partly to demonstrate again how gradually the change came about, and that in fact it's impossible to fix a dividing line between old and new. Please understand; this reference to a tonic is meant to show how much all these changes still took place within the bounds of harmonic progression. There's hardly a single consonant chord any more. But though things had gone so far, we still find the very important factor that governed music for centuries—this exploitation of relationship to a key.

Schoenberg's Op. 11: three piano pieces (written about 1908).

No. 1: ends on E flat—it doesn't close in any key. The final bass note is the fundamental. How does the piece come to have E flat as a tonic? Let's look at the opening; up to bar 13 every note in the chromatic scale occurs, except E flat!\*

No. 2: I ask in the same way, how does Schoenberg come to end with the bass note E flat? What has everything that happens to do with E flat?

One must try to solve the problem by coming at it from all sides, and the

\* In fact E flat occurs first in bar 12 of the first piece. It has been suggested that Webern's "No. 1" and "No. 2" mean that he was making two separate points, both about the *second* piece. As E flat comes as early as bar 2 of this piece, the passage remains obscure. L.B.



following explanation is quite feasible. D-F-D at the beginning—that could be D minor (the keynote could also be B flat, but the B flat never comes). Then in bar 16 there's a second idea which though not in D flat major does approach the key; the B flat in the bass (B flat triad!) is in fact there, and is held for three bars. The whole course of the piece shows quite clearly how through its entire layout everything is related to the tonic E flat: but this E flat is not introduced as tonic.

What, then, does this show us once again? One's tonal feeling is aroused. This relationship was always there up to now. It isn't easy to talk about all the things we've been through! There we still see the key given; here we don't see it any more.

*In this musical material new laws have come into force that have made it impossible to describe a piece as in one key or another.* It was so ambiguous. Things have asserted themselves that made this "key" simply impossible. We sensed that the frequent repetition of a note, either directly or in the course of the piece, in some way "got its own back," that the note "came through." It had to be given its due—that was still possible at this stage; but it proved disturbing, for example, if one note occurred a number of times during some run of all twelve. Individual parts in a polyphonic texture no longer moved in accordance with major and minor, but with chromaticism. (Schoenberg said, "The most important thing in composing is an eraser!") It was a matter of constant testing; "Are these chordal progressions the right ones? Am I putting down what I mean? Is the right form emerging?"

What happened? I can only relate something from my own experience; about 1911 I wrote the "Bagatelles for String Quartet" (Op. 9), all very short pieces, lasting a couple of minutes—perhaps the shortest music so far. Here I had the feeling, "When all twelve notes have gone by, the piece is over." Much later I discovered that all this was a part of the necessary development. In my sketch-book I wrote out the chromatic scale and crossed off the individual notes. Why? Because I had convinced myself, "This note has been there already." It sounds grotesque, incomprehensible, and it was incredibly difficult. The inner ear decided quite rightly that the man who wrote out the chromatic scale and crossed off individual notes *was no fool*. (Josef Matthias Hauer, too, went through and discovered all this in his own way). In short, a rule of law emerged; until all twelve notes have occurred, none of them may occur again. The most important thing is that each "run" of twelve notes marked a division within the piece, idea or theme.

My Goethe song, "Gleich und Gleich" (Four Songs Op. 12, No. 4, composed in 1917) begins as follows: G sharp -A-D sharp -G, then a chord E-C-B flat-D, then F sharp-B-F-C sharp. That makes twelve notes: none is repeated. At that time we were not conscious of the law, but had been sensing it for a long time. One day Schoenberg intuitively discovered the law that underlies twelve-note composition. An inevitable development of this law was that one gave

the succession of twelve notes a *particular order*. Imagine; twelve parts, sixty parts, and each of them has begun the series of twelve notes! (It isn't note-repetition that's forbidden, but within the order fixed by me for the twelve notes none may be repeated!)

Today we've arrived at the end of this path, i.e. at the goal; the twelve notes have come to power and the practical need for this law is completely clear to us today. We can look back at its development and see no gaps.

(12th February, 1932)

## VI

Before we knew about the law we were obeying it. This proves that it really did develop quite naturally. There's no longer a tonic. All twelve notes have equal rights. If one of them is repeated before the other eleven have occurred it would acquire a certain special status. The twelve notes, in a firmly fixed order, form the basis of the entire composition. Twelve-note composition is not a "substitute for tonality" but leads much further.

Great composers have always striven to express unity as clearly as possible. *One* means of doing it was tonality. Another was provided by polyphony. One of the earliest surviving polyphonic pieces is a canon—an English summer canon from the 13th century. What is a canon? A piece of music in which several voices sing the same thing, only at different times; often what is sung occurs in a different order (crab canon, mirror canon). The crowning glory of polyphonic music was the fugue, based on a fugue theme (answer, stretto, etc.). Why does this crop up again? Indeed, yet again, it was the same thing but different! Thematic unity came with homophonic music, but the fugue, too, is really thematic. Now something very remarkable emerged; soon there was an attempt to create some kind of unifying thematic connection between the principal part and the accompaniment. We see an absolute pull from homophonic music back to polyphony, an urge to deepen and clarify the unity.

An example: Beethoven's "Six easy variations on a Swiss song." Theme: C-F-G-A-F-C-G-F, then backwards! You won't notice this when the piece is played, and perhaps it isn't at all important, but it is *unity*.

Further development of unity in Brahms, Mahler, Schoenberg. Schoenberg's first string quartet (in D minor)—the accompanying figure is thematic! This urge towards unity, relationships, leads of its own accord to a form the classical composers often turned to, and which in Beethoven became most important—variation form. A theme is given. It is varied. In this sense variation form is a forerunner of twelve-note composition. An example: Beethoven's Ninth Symphony, finale—theme in unison; all that follows is derived from this idea, which is the primeval form. Unheard-of things happen, and yet it's constantly the same thing!

You'll already have seen where I am leading you. Goethe's primeval plant; the root is in fact no different from the stalk, the stalk no different from the leaf, and the leaf no different from the flower: variations of the same idea.

(19th February, 1932)

## VII

Last time, starting from Goethe's "primeval plant," we dealt with the "other path." The same law applies to everything living: "variations on a theme"—that's the primeval form, which is at the bottom of everything. Something that seems quite different is really the same. The most comprehensive unity results from this.

This urge to create unity has also been felt by all the masters of the past. Remember the canon form we mentioned last time: everyone sings the same thing. If I repeat several times, "Shut the door," or, as Schoenberg said about a questionable composer, "I am an ass," then unity of that kind is already established. An ash-tray, seen from all sides, is always the same, and yet different. So an idea should be presented in the most multifarious way possible.

One such way is backwards movement—cancrizar; another is mirroring—inversion. The development of tonality meant that these old methods of presentation were pushed into the background, but they still make themselves felt in a way, even in classical times, in "thematic development." This path led to every-increasing refinement of the thematic network.

How has such an unusual degree of unity come about in twelve-note music? Through the fact that in the course of the row on which the composition is based no note may be repeated before all have occurred. This law developed gradually, on its own, but it would have been impossible without using *both* the paths we have described. And here the urge toward maximum unity found its fulfilment. For the rest, one composes as before, but on the basis of the row; on the basis of this fixed series one will have to invent. (Here too the result can be rubbish, as in tonal composition: nobody blamed major and minor for it!)

If an untutored ear can't always follow the course of the row, there's no harm done—in tonality, too, unity was mostly felt only unconsciously. The course of the row can be repeated several times, even quite identically, as in the Sonnet from Schoenberg's "Serenade." Something will stick in even the naivest soul. So there will be a multiplication of all the things that were aimed at along the second path, bound up with the urge toward thematic development.

All the works created between the disappearance of tonality and the formulation of the new twelve-note law were short, strikingly short. The longer works written at the time were linked with a text which "carried" them (Schoenberg's

“Erwartung” and “Die Glückliche Hand,” Berg’s “Wozzeck”), that’s to say, with something extra-musical. With the abandoning of tonality the most important means of building up longer pieces was lost. For tonality was supremely important in producing self-contained forms. As if the light had been put out!—that’s how it seemed. (At least this is how it strikes us now). At the time everything was in a state of flux—uncertain, dark, very stimulating and exciting, so that there wasn’t time to notice the loss. Only when Schoenberg gave expression to the law were larger forms again possible.

*How does the row come to exist?* It’s not arbitrary, the result of chance; it’s arranged with certain points in mind. Here there are certain formal considerations, for example one aims at as many different intervals as possible, or certain correspondences within the row—symmetry, analogy, groupings (thrice four or four times three notes, for instance). Our—Schoenberg’s, Berg’s and my—rows mostly came into existence when an idea occurred to us, linked with an intuitive vision of the work as a whole; the idea was then subjected to careful thought, just as one can follow the gradual emergence of themes in Beethoven’s sketchbooks. Inspiration, if you like.

Adherence is strict, often burdensome, but it’s *salvation!* We couldn’t do a thing about the dissolution of tonality, and we didn’t create the new law ourselves—it forced itself overwhelmingly on us. This compulsion, adherence, is so powerful that one has to consider very carefully before finally committing oneself to it for a prolonged period, almost as if taking the decision to marry; a difficult moment! Trust your inspiration! There’s no alternative!

So the row is there. At once re-casting, development starts. How is the system now built up? Our inventive resourcefulness discovered the following forms: cancrizan, inversion, inversion of the cancrizan. Four forms altogether. There aren’t any others. However much the theorists try.

Each of these four forms can be based on each of the twelve degrees of the scale. Bearing these twelve transpositions in mind, each row can manifest itself in 48 different ways.

Considerations of symmetry, regularity are now to the fore, as against the emphasis formerly laid on the principal intervals—dominant, subdominant, mediant, etc. For this reason the middle of the octave—the diminished fifth—is now most important. For the rest, one works as before. The original form and pitch of the row occupy a position akin to that of the “main key” in earlier music; the recapitulation will naturally return to it. We end “in the same key!” This analogy with earlier formal construction is quite consciously fostered; here we find the path that will lead us again to extended forms.

(26th February, 1932)

## VIII

Linking up with my last remarks, I should like to say something today about the purely practical application of the new technique. But first I’ll answer a

question put to me by one of you: "How is free invention possible when one has to remember to adhere to the order of the series for the work?"

Strictly speaking, the answer might be this: "Couldn't one ask the same question about the seven-note scale?" Here twelve notes are the basis, there seven: our adherence to the row is indeed a particularly strict adherence, but adherence of this kind has always existed; in the strict polyphonic forms such as canon and fugue, which are tied to the chosen theme. J. S. Bach's "Art of Fugue" is based on a single theme. What else could this work be but the answer to the question, "What can I do with these few notes?" There's forever something different yet the same. Bach wanted to show all that could be extracted from one single idea. Practically speaking, the details of twelve-note music are different, but as a whole it's based on the same way of thinking. In this sense the "Art of Fugue" is equivalent to what we are writing in our twelve-note composition. In Bach it's the seven notes of the old scale that are the basis, here the chromatic scale. One invents on this new basis.

As an example, Schoenberg's Wind Quintet, Op. 26:

The row is E flat-G-A-B-D flat-C; B flat-D-E-F sharp-A flat-F. One can see at a glance that the row falls into two parts that are of parallel construction as regards intervals, and the second of which lies a fourth lower, or a fifth higher if you like, so that in a sense it's the dominant of the first part ("tonic"). In bar 7 the cancrizan of the row occurs in the flute part. In the third movement the row is at first divided between horn and bassoon; with a certain regularity the horn picks out notes of the row for its melody. From bar 8 onward the notes are differently distributed among the individual instruments. Here we find that pedal-like repetitions of the same note don't infringe the basic law. (Naturally any note can also occur in whatever octave one pleases.)

So this is the "primeval plant" we discussed recently! Ever different and yet always the same! Wherever we cut into the piece the course of the row must always be perceptible. This is how unity is ensured; something surely sticks in the ear, even if one's unaware of it, and we've often found that a singer involuntarily continues the row even when for some reason it's been interrupted in the vocal part.

The twelve-note row is, as a rule, not a "theme." But I can also work without thematicism, that's to say much more freely, because of the unity that's now been achieved in another way; the row ensures unity. As we gradually gave up tonality an idea occurred to us: "We don't want to repeat, there must constantly be something new!" Obviously this doesn't work, it destroys comprehensibility. At least it's impossible to write long stretches of music in that way. Only after the formulation of the law did it again become possible to write longer pieces.

We want to say "in a quite new way" what has been said before. But now I can invent more freely; everything has a deeper unity. Only now is it possible to compose in free fantasy, adhering to nothing except the row. To put it

quite paradoxically, only through these unprecedented fetters has complete freedom become possible!

Here I can only stammer. Everything is still in a state of flux. The old Netherlanders were similarly unclear about the path they were following, and in the end this development led to Schoenberg's "Harmonielehre"! Here there's certainly some underlying rule of law, and it's our faith that a true work of art can come about in this way. It's for a later period to discover the closer unifying laws that are already present in the works themselves. When this true conception of art is achieved, then there will no longer be any possible distinction between science and inspired creation. The further one presses forward, the greater becomes the identity of everything, and finally we have the impression of being faced by a work not of man but of Nature. How does a man keep the 48 forms in his head? How is it that he takes now number seven, then number forty-five, now a cancrizan, now an inversion? Naturally that's a matter for reflection and consideration. I know how I invent a fresh idea, and how it continues, and then I look for the right place to fit it in.

An example: the second movement of my Symphony (Op. 21, written in 1928). The row is F-A flat-G-F sharp-B flat-A; E flat-E-C-C sharp-D-B. It's peculiar in that the second half is the cancrizan of the first. This is a particularly intimate unity. So here there are only 24 forms, since there are a corresponding number of identical pairs. In the accompaniment to the theme the cancrizan appears at the beginning. The first variation is in the melody a transposition of the row starting on C. The accompaniment is a double canon. Greater unity is impossible. Even the Netherlanders didn't manage it. In the fourth variation there are constant mirrorings. This variation is itself the midpoint of the whole movement, after which everything goes backwards. So the entire movement is itself a double canon by retrograde motion!

Now I must say this: what you see here—cancrizan, canon, etc.—constantly the same thing—isn't to be regarded as a "tour de force"; that would be ludicrous. I was to create as many connections as possible, and you must allow that there are indeed many connections here!

Finally I must point out to you that this is so not only in music. We find an analogy in language. I was delighted to find that such connections also often occur in Shakespeare, in alliteration and assonance. He even turns a phrase backwards. Karl Kraus' handling of language is also based on this; unity also has to be created there, since it enhances comprehensibility.

And I leave you with an old Latin saying:

SATOR  
AREPO  
TENET  
OPERA  
ROTAS

(2nd March, 1932)

## POSTSCRIPT

The old Latin saying "Sator Arepo Tenet Opera Rotas," with which Webern ended his lecture on March 2nd, 1932, could be translated as (among other things) "The Sower Arepo Keeps the Work Circling." The magic square in which Webern arranged the saying clearly shows the basic principle of twelve-tone technique—the equal status of basic set, inversion, cancrizan and inverted cancrizan.

To supplement the lectures I should add a number of notes I made between September 1936 and February 1938 when I was working my way through the theory of form as Webern's private pupil. I used to go once a week to his flat in Maria Enzersdorf, near Mödling, and on my way back in the train I always hastened to jot down my experiences with Webern. We analysed classical works almost exclusively; only twice did he talk at any length about his own works—about his Symphony Op. 21 and his Quartet Op. 22. He said of the latter, when we were analysing the Scherzo of Beethoven's Piano Sonata Op. 14 No. 2, that during the analysis he had in fact realised that the second movement of his quartet was formally an exact analogy with the Beethoven Scherzo.

Of my notes, which fill a whole notebook, I shall here quote only a few that are of very general importance.

The primary task of analysis is to show the functions of the individual sections; the thematic side is secondary.

In tonal music, variation is possible by merely altering the inversion or spacing of chords. What has twelve-tone technique to set against this?

To develop means "to lead through wide spaces."\*

Mozart and Haydn have less "thematic exactness" than Beethoven. But they already create room for all that happens in sonata form, just as the gardener digs a furrow where he buries his shoots.

Not until Beethoven is the horizontal presentation of musical ideas perfected; then there is a move backward, above all in Brahms. In his music the independently developed subsidiary parts determine the character of the theme; in Schoenberg they serve to produce relationships of content.

An important saying of Schoenberg's: compression always means extension! Distinction between "unfolding" and "development" of themes. (Bach and Beethoven).

\* Ger. "Durchführung" ("leading-through") = the "development section" in sonata form.

The contrast between firm and loose is a fundamental one. But the firmness of a first subject (presentation of the theme!) is different from that of a codetta. Even in Bach's fugues this contrast can be seen in the episodes. Example: the six-part Ricercar from the "Musical Offering."

About rondo form: its development tends to take away from the rondo its original character of a light closing movement. In Brahms and Bruckner this happens through the introduction of developing (contrapuntal) elements; in Mahler new ideas are unfolded in the episodes; hence the use of rondo form for middle movements as well.

In studying form one ought really to take variation form as early as possible. Schoenberg thought so too.

Examining the development of variation technique one has direct access to serial technique. Relationship to theme or row is quite analogous. But Schoenberg once said: the row is more and less than a variation-theme. More, because the whole is more strictly tied to the row; less, because the row gives fewer possibilities of variation than the theme.

\* \* \*

As a personal recollection of my dear master and friend, some quotations from the thirty-one letters I received from him between April 29th, 1938 and July 6th, 1944.

*29th April, 1938*

Please send me a lot of news and write often. Now of all times one needs to hear from one's friends. So already I was eagerly expecting your news. Just in the last few weeks I've been hard at work and have completed my string quartet (Op. 28). Now it's off to America, i.e. the parts to Kolisch in London. I had hoped to be able to go through it with him here . . . The piano score of my choral piece ("Das Augenlicht") was published recently (UE). Now indeed I'm eager to know whether the B.B.C. chorus will learn it. The conductor is to be Scherchen. Performance 17.VI in the first concert of the festival (I.S.C.M. Festival in London). Will you be going there? You did once say you meant to. Nobody from here can go. I did receive an invitation but I shall hardly be able to get away. This time there won't be a "delegate" from the Austrian section. Its future and that of the Association are uncertain for the time being. In any case it's forbidden (by law) to call itself "Austrian" any more. At the moment I am solely responsible for signing everything . . . Did you hear about the awful thing that happened when my string trio was performed in London? The cellist got up saying "I cannot play this thing!" and *walked off the platform!* Surely nothing like that has ever happened before! . . . What else do you hear from the world, from our friends? Do write again very soon. It's a business with my teaching, too; at the moment I've only *one* pupil. You have to be patient!



27th July, 1939

Can I perhaps be of assistance? You surely know you can count on me for what my feeble powers are worth! Let's hope you'll be able to stay where you are for a long, long time yet (i.e. until you find something more like what you want). Rest assured that all these difficult problems are very much on my mind, cause me constant concern and oppress me beyond measure! But we do have a "foothold" and in my opinion an impregnable one, so I have never for one single moment lost heart (either on my own account or in my worries about others!). Dear friend, that makes all the difference. Seen from this "foothold" the "authorities" you mention (that's what one has to call them!) have always looked to me like "ghosts!"

20th October, 1939

Yes, I too believe it would be best for you and yours to stay where you are in the present circumstances, and that perhaps it was just as well that what you once intended didn't come about. So I wish you as long a stay as possible. But maybe things will change again after all. Let's hope, dear friend!

I was very pleased to have your news about the performance of my *Passacaglia* on the 7.II under Erich Schmid (in Winterthur) . . . If an invitation to me could be arranged I should be very glad and should naturally come *very gladly!*\* . . . In certain circumstances my visit could even be of *far-reaching importance* for me. So I should set great store by its coming off! I am delighted that you thought of *that* piece. Very good, my dear Reich! Thank you very much! Anything of the sort did seem quite out of the question for me! I take it as a good omen!

Now, the concert planned for the I.S.C.M. (in Basel). As far as I'm concerned, which songs were you thinking of? It's very important to choose the right ones. E.g.; from Op. 3, "Dies ist ein Lied," "Kahl reckt der Baum"; from Op. 4, "So ich traurig bin" (that has *never* yet been sung!) or "Eingang;" from Op. 12, "Der Tag ist vergangen" and "Gleich und Gleich." That would be a group of 5 songs that ought to come in *that order!* As far as instrumental pieces of mine are concerned, if there were a *quartet* that would play if not all 5 movements (Op. 5), then perhaps Nos. 2, 4 and 5! That would certainly work! Well, in fact! Otherwise the violin pieces would be a better idea than the cello pieces. Definitely not those! Not because I don't think they are good. But they'd just be totally misunderstood. It's very hard for performers and listeners to make anything of them. Nothing experimental! Create a favourable atmosphere for the performance of the *Passacaglia*!

Look, look, everything I've mentioned is *thirty years old* already! And still I have to worry! As if it were a matter of "world premieres." If only I could at last be understood a little! But what you are doing is splendid! So keep my suggestions in mind. About your lecture: *nothing theoretical!*

\* Dr. Werner Reinhart arranged the invitation. We spent some memorable hours with Webern in Winterthur and Basel in February 1949. W.R.

Rather say *how you like this music!* People will believe it from you, and that makes a good impression . . .

Imagine, now I have to do work for the U.E., a thick, thick vocal score. (I'm not telling more for the time being!) Yes, in September I lost my steady job at the Radio; the post was liquidated, I was left out in the cold! So I had to take what there was, quickly! It's a devil of a situation. At the moment I haven't a *single* pupil.

So, alas, I had to put off work on the Cantata (Op. 29) for a time, otherwise it might already be finished. But I hope it will be possible quite soon. More about this work next time. Already there are all sorts of things to write about it.

*9th December, 1939*

I wanted to reply at once, because I was again so very glad to have your letter (of November 2nd), in general and in particular, but I was quite buried in my work; the Cantata (Op. 29) is now complete . . . It's\* constructed as a four-part double fugue. But the subject and counter-subject are related like antecedent and consequent (period), and elements from the other mode of presentation (horizontal) also play a part. One could also speak of a scherzo, also of variations! Yet it's a strict fugue. For choir, soprano solo and orchestra. Now I'm preparing the score.

*March 3rd, 1941*

I haven't written to you for a long, long time, but there were reasons. In fact I needed that long to get to the end of the score of my orchestral variations. But now it's ready. And I wouldn't and couldn't do anything else, except things that absolutely couldn't be postponed. Certainly I'd sensed that it would be difficult, I think I even said so to you, but not that it would need that amount of time. I sat there for weeks and weeks. And now, I think, something quite simple and perhaps obvious has emerged.

The piece lasts around quarter of an hour, very quick tempo almost throughout, but sometimes with the effect of a *sostenuto*. I settled on a form that amounts to a kind of overture, but based on variations, and that's also the title, "Variations for Orchestra" (Op. 30). The orchestra is small: fl., ob., cl., bass cl., hn., trp., trbn., tuba., cel., harp, timps., str. (with double bass).

In fact there's again the synthesis; the presentation is horizontal as to form, vertical in all other respects. My "overture" is basically an "adagio"-form, but the recapitulation of the first subject appears in the form of a development, so this element is also present. Beethoven's "Prometheus" and Brahms' "Tragic" are other overtures in adagio-forms, not sonata form! . . . There isn't a copy ready yet, but U.E. will surely make it available as quickly as possible. Now, my dear chap, say your piece and exert your influence, I beg of you. If only some notice at all could be taken of my work!

\* The third movement.

May 3rd, 1941

The copy of my Variations is ready—it's a photocopy, that came out very well; a number of things are clearer than in my manuscript, and tonight Schlee himself is taking it with him to Switzerland—a particularly good idea for reasons of safety. So point one of the whole affair is approaching completion on time, let's hope everything else will!

I should like very briefly to tell you a little about the work, so that you have an effective counter to possible objections and can throw at least a certain amount of light. So do understand me aright; I should like to talk quite differently about it to you personally, when opportunity offers.

Won't the reaction when they first see the score be "Why, there's 'nothing there' "!!! Because those concerned will miss the many, many notes they're used to seeing, in R. Strauss, etc. Correct! But that in fact touches on the most important point: it would be vital to say that here (in my score) there is indeed a different *style*. Yes, but what sort? It doesn't look like a score from before Wagner either—Beethoven, for instance, nor does it look like Bach. Is one to go back still further? Yes—but then *orchestral* scores didn't yet exist!

But it should still be possible to find a certain similarity with the type of presentation that occurs in the Netherlands. So, something "archaistic"? Like Josquin orchestrated? The answer would have to be an energetic "no"! What, then? Nothing like any of that!

Now you would have to say unequivocally: this is music (mine) that's in fact based *just as much* on the laws achieved by musical presentation *after* the Netherlands; that doesn't reject the development that came then, but tries on the contrary to continue it into the future, and doesn't aim to return to the past. What kind of *style*, then? I believe, again, a new one. Exactly following natural law in its material, as the earlier, preceding forms followed tonality; that's to say, *building* a tonality, but one that uses the possibilities offered by the nature of sound in a different way, namely on the basis of a system that does "relate only to each other" (as Arnold has put it) the 12 different notes customary in Western music up to now, but doesn't on that account (I should add to clarify things) ignore the rules of order provided by the nature of sound—namely the relationship of the overtones to a fundamental. Anyway it's impossible to ignore them, if there is still to be *meaningful* expression in sound! But nobody, really, is going to assert that we don't want that! So: a style, whose material is of that kind, and whose formal construction *relates the two possible types of presentation to each other*.

Now I should be glad to explain the piece to you from the score, But a few important things still, briefly.

The "theme" of the Variations extends to the first double bar; it is conceived as a period, but is "introductory" in character. Six variations follow (each one to the next double bar). The first bringing the first subject (so to speak) of the overture (andante-form), which unfolds in full; the second the bridge-passage, the third the second subject, the fourth the recapitulation of the first subject—for it's an andante form!—but in a *developing* manner, the fifth, repeating the manner of the introduction and bridge-passage, leads to the Coda; sixth variation.

Now everything that occurs in the piece is based on the two ideas given in the first and second bars (double bass and oboe!). But it's reduced still more, since the second shape (oboe) is itself retrograde; the second two notes are the cancrizan of the first two, but rhythmically augmented. They are followed, on the trombone, by a repetition of the first shape (double-bass), but in diminution! And in cancrizan as to motives and intervals. That's how my row is constructed—it's contained in these thrice four notes.

But the succession of motives takes part in this cancrizan, though with the use of augmentation and diminution! These two kinds of variation now lead almost exclusively to the various variation ideas; that's to say motivic variation happens, if at all, only within these limits. But through all possible displacements of the centre of gravity within the two shapes there's forever something new in the way of time-signature, character, etc. Simply compare the first repetition of the first shape with its first form (trombone or double-bass!) And that's how it goes on throughout the whole piece, whose twelve notes, that's to say the row, contain its entire content in embryo! In miniature! With bars one and two, the two tempi of the piece as well (pay attention to the metronome marks!).

Now, that was quite something. But I must stop here! All the same I shall be glad to say more about it another time.

*August 23rd, 1941*

I'm terribly sorry to be so long answering your long, welcome letter. Don't be offended; I've been completely absorbed in my work (2nd Cantata, Op. 31) and still am. The first piece in a new choral work (with soli and orchestra) that may well go beyond the scope of a cantata—at least that's my plan; so, this first piece is complete and even written down in score. And I'd like to tell you a little about it straight away; formally it's an introduction, a recitative! But this section is constructed in a way that perhaps none of the "Netherlanders" ever thought up; it was probably the hardest task (in that respect) that I've ever had to fulfil!

You see, the basis is a four-part canon of the most complicated kind. But the way it's carried out was only possible, I think, on the basis of the law of the row, which is quite particularly in evidence here. In fact this may well be the first time it's been so completely operative.

I read in Plato that "Nomos" (law) is also the word for "melody." Now, the melody the soprano soloist sings in my piece as the introduction (recitative) may be the *law* (Nomos) for all that follows!

As with Goethe's "primeval plant"—"with this model, and the key to it, one can straightway invent plants ad infinitum . . . The same law will be found to apply to all other living matter"! *Isn't that the meaning of our law of the row, at its deepest?*

July 31st, 1942

About my work; I can report that I've made another fair step forward. My time has been wholly taken up with it lately; another piece of the planned "oratorio" is all in order and down on paper. It's a soprano aria with chorus and orchestra. A voice gives out the law—in this case the soprano soloist—that's to say the "melody"—but the Greeks had the same word for that as for law: "Nomos." So the "melody" has to "lay down the law."

That's how it's always been in music by the masters! Whether I shall bring it off as they did, only God knows, but at least I've recognised what's involved!

In my case; nothing happens any more unless it's agreed on in advance according to this "melody"! It's the law, truly the "Nomos!" But agreed on in advance on the basis of canon!

Naturally, the "row" in itself constitutes a law, but it needn't also be the "melody"! But since in my case it in fact *is*, the row takes on a quite special importance, on a higher level so to speak, rather like the chorale melodies in Bach's arrangements. The foundations of our technique in general are there, but I think I'm returning to them in a quite special sense.

4th September, 1942

So now a positive success is in sight. I'd love to believe that things will stay the way Scherchen told you, and that my Variations (Op. 30) will really be performed on December 9th. You can imagine how pleased I was about your news!\* . . . Everything going as well and pleasantly as last time—it's a very cheering thought! My dear fellow!!!

The U.E. have already started preparing the material; now the Collegium Musicum should order it from them. When one's faced by a first performance, especially orchestral, one's thoughts are mainly (and naively)—how will it sound? And one enjoys it in advance, equally naively! But when one actually performs, then there must also be the right sensory impression. Revel in sounds, you conductors, then you do right!

Meanwhile I've completed another piece. It's to form the first part of the planned "oratorio," together with the preceding ones. It's for choir and orchestra, conceived rather as a "chorale." But again those relationships—

\* The planned performance of the "Variations for Orchestra" Op. 30 in Winterthur finally took place on March 3rd, 1943.

the second part (alto) sings the notes of the first (tenor) backwards, the third (soprano) has the inversion of the second, and the fourth (bass) is the inversion of the first, but moreover sings the notes of the third backwards!—So, a double interlinking, one and four, two and three (by inversion), also one and two, three and four (cancrizan). I think the look of the score will amaze you. Long note-values but very flowing tempo.

*August 6th, 1943*

I'm very sorry to be so overdue. I wanted to say a number of things to you directly on my return from Winterthur, but once again I've hardly taken my eyes off my work. I've completed another piece as part of the plan I've told you of several times; a bass aria. It's all even stricter, and for that reason it's also become still freer. That's to say, I move with complete freedom on the basis of an "endless canon by inversion." By variation, diminution, etc.—rather as Bach does with his theme in the "Art of Fugue." But formally the aria is ternary, with a c.32-bar theme of periodic structure; so, once again, a very close combination of the two types of presentation. Hymn-like character; "Die Stille um den Bienenkorb in der Heimat."

But I really must revert to the subject of Winterthur; I'm still sorry that this time we were hardly able to talk to each other alone! It did me a lot of good to be able to hear my piece. Because it was very important for me to check personally what it proves—and I believe I was right; namely that when that kind of unity is the basis, even the most fragmented sounds must have a completely coherent effect, and leave hardly anything to be desired as far as "comprehensibility" is concerned. Isn't that so? I believe the effect on the public also proved this!

*October 23rd, 1943*

Dear friend, I really didn't mean to make you wait so long for an answer to your letter of August 30th, for which many thanks again! But this is how it was; as you know, I'm buried in my work. Another piece will soon be finished, a three-part chorus for women's voices with soprano solo and orchestra. It's giving me tremendously difficult problems to solve.

What you say about my orchestral variations gave me very genuine pleasure, and equally so your plans for getting my music performed . . .

When I was with you in March, Frau Gradmann already had the 3 Songs Op. 23, which have just appeared (in print). I'm all for the idea of giving the first performance of these songs (even they are nearly ten years old) at the concert you plan in Basel; 6 in all (3 in each of Op. 23 and 25). I think it would be best to put these songs in the middle of the programme, and to play the piano variations (Op. 27) between them. Before and after this group, a selection from the songs with piano Op. 3, 4 and 12. Whichever suit Frau Gradmann best. Perhaps begin with Nos. 1, 4 and 5 of Op. 3 (as far as I'm concerned those are

the ones I'd like, but I don't think Frau Gradmann has ever sung them), whichever of Op. 4 she prefers, and perhaps 1, 2 and 4 of Op. 12. So two groups of 4-5 songs. And that could make up the whole programme; it would then last about an hour, and that would be quite adequate, my dear Reich! No longer!

As for the date, only one thing: don't tie yourself to the date mentioned!\* Don't make it a direct birthday celebration—no, no: a performance! Don't even mention it—that ———, how utterly unimportant, how irrelevant, for goodness' sake! Please do fall in with this request!

*January 10th, 1944*

Dear friend, now at last I can send my very heartfelt thanks for everything; your kind telegram, your letter, which gave me so much pleasure, because it again reminded me in the best possible way of something I ought to thank you for once again and very specially; your unflinching, courageous, self-sacrificing loyalty!

This 5th of December in Basel (an afternoon concert of the Basel section of the I.S.C.M., which I organised, with the first performances of the Songs Op. 23, the pieces for violin and piano Op. 7, the piano variations Op. 27, the pieces for violoncello and piano Op. 11 and a brief address by myself. W.R.)—its success, that was yet another gracious deed on your part (and, as has already been seen, one with consequences), and such a magnificent effort that I can't hope to say what I feel about it! So, my dear friend, I embrace you, my heart overflowing with the finest feelings!

And I should also like to express them by calling you "Du"; I shall go straight on and use it, for it makes things much more friendly.

You're anxious to know what happened here for the 3rd XII.; we met at Ratz' in the evening; it was in fact the day for the "course"—those taking part in the course, the Apostels and—this gave me particular pleasure—Frau Helene (Alban Berg's widow. W.R.). We—my wife and I—had already been to her in Hietzing in the afternoon, and she came on with us to Ratz', who was all ready with a splendid buffet. So for once on a Friday (course day) evening we had something rather more enjoyable than the usual intellectual refreshment. That's how it was!

*February 23rd, 1944*

I was very glad to have your letter of February 1st! It again showed me how full of splendid plans you are, and that your initiative never flags! But above all I was pleased *on your account*; to live means to defend a *form*—Hölderlin puts it in some such way. I'm glad to tell you that for a long time I've been

\* Webern's 60th birthday, December 3rd, 1943. W.R.

intensely interested in this poet. Imagine the effect on me when I found this passage in his notes on the translation of Oedipus: "Again, other works lack *infallibility*, compared with those of the Greeks; at least until now they've been judged by the impressions they make, rather than by their *ordered calculus* and all the other procedures *by which beauty is produced*." Need I even say why I was so struck by the passage?

The score of my string-orchestral arrangement of Op. 5\* will be sent to you as soon as possible. It should be played by as large a body of strings as possible, so that the constant regroupings (*tutti*, halves, *sol*) stand out in a clearly audible way. It's indeed turned into something quite new! As regards the sound! I can only say "What a lot those conductor gentlemen miss!" I'm very glad that you're now taking up the cudgels on their behalf! I think people will be amazed! . . .

As for my work; I'd already started on a seventh piece when it became clear to me (I'd sensed it already) that the six pieces I'd completed made a *musical* whole, either as part of a larger work or on their own. I decided on the latter, i.e., I made some minor changes of order and grouped the six pieces as a "cantata": Cantata No. 2,† for soprano and bass soli, choir and orchestra. Duration half an hour. You'll see, too, how well it suits the structure of the text. If I come to write another vocal work it will be quite different! At the moment I'm writing a purely instrumental piece, a "concerto" (in several movements for a number of instruments).

May 6th, 1944

Naturally you can keep the score of my 2nd Cantata to study as long as you need it! What will you say about it? If, for example, you show them what the score of the sixth piece looks like?

The sketches I made for an instrumental piece—I wrote to you about them—have turned into a setting of a very long poem by Hildegard Jone: "Das Sonnenlicht spricht; . . . *Sehet, die Farben stehen auf!*" The poetic form will be matched by something correspondingly long and unified, and I'm particularly interested in solving this. Again for soli and choir (with orchestra).

How will you celebrate September 13th?\*\*\* Pass on my deepest remembrances, which possess me night and day, my unspeakable longing! But also my unwearying hopes for a happy future!

\* 5 Pieces for String Quartet, dating from 1909, arranged in 1930. W.R.

† Webern's last completed work. W.R.

\*\*\* Schoenberg's 70th birthday. W.R.



The "happy future" Webern hoped for was denied him in the flesh by his premature, tragic end, but the present triumph of his uncompromising, lofty works and his effect on the younger generation have fulfilled his hopes in a higher sense, which he foresaw in his humble self-abnegation and proud assurance.

Willi Reich.

Zürich, end of March 1960

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